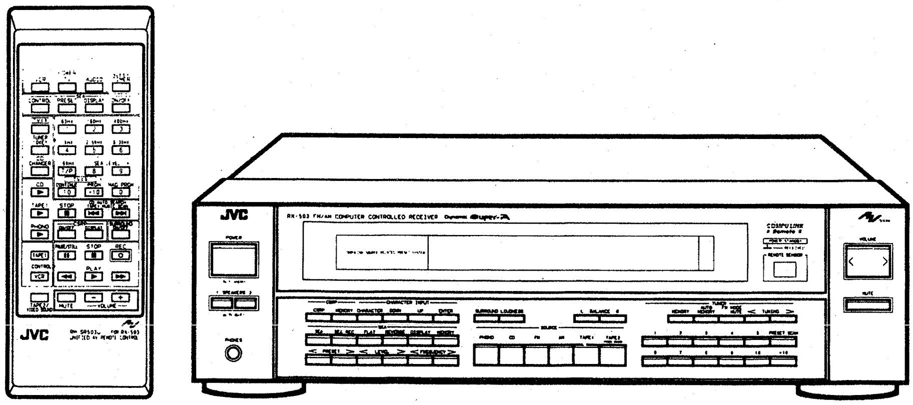
JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

RX-503BK
MODEL No. RX-503LBK



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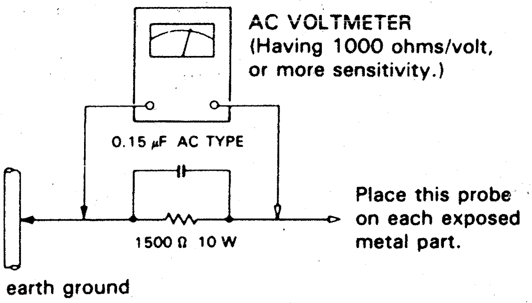
No.20160
Feb.1990

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Specifications

AMPLIFIER SECTION

Output power: (CD IN→SP.OUT) 2-channel operation	**80 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.03% total harmonic distortion.**
Intermodulation distortion	0.03 % at 80 watts
Input sensitivity/impedance	
PHONO	2.5mV/47k ohms
TAPE 1 PLAY, TAPE 2/VIDEO SOUND PLAY, CD,	200 mV/47k ohms
Recording output level	200mV
Frequency response	
PHONO (RIAA equalization)	20 Hz — 20 kHz, ± 0.5 dB
TAPE 1 PLAY, CD, TAPE2/VIDEO SOUND PLAY	10 Hz — 50 kHz, ±1 dB
Signal-to-noise ratio	
PHONO	71 dB ('66 IHF) 78 dB ('78 IHF, REC OUT)
TAPE 1 PLAY, CD, TAPE2/VIDEO SOUND PLAY	91 dB ('66 IHF), 85 dB ('78 IHF)

S.E.A. SECTION

Center frequencies	63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 16 kHz
Control range	±10 dB

FM TUNER SECTION (IHF)

Tuning range	87.5 MHz — 108.0 MHz
Usable sensitivity	Mono 10.8 dBf (0.95μV/75 ohms)
50 dB quieting sensitivity	Mono 16.3 dBf (1.8 μV/75 ohms) Stereo 38.3 dBf (22.5 μV/75 ohms)
Signal-to-noise ratio (IHF-A net, 85 dBf)	Mono 80 dB Stereo 73 dB
Total harmonic distortion (1 kHz)	Mono 0.15% Stereo 0.2%
Frequency response	30 Hz — 15 kHz , (+0.5 dB, −3 dB)
Capture ratio (85 dBf)	1.5 dB
Alternate channel selectivity	60 dB (± 400 kHz)
IF response ratio	85 dB (at 98 MHz)
Stereo separation	40 dB (at 1 kHz)

AM TUNER SECTION

Tuning range	530 kHz — 1,710 kHz
Sensitivity	30 μV* (external) 300 μV/m* (loop antenna)
Signal-to-noise ratio	50 dB* (100mV/m)
Selectivity	25 dB, (±10 kHz)
Image response ratio	40 dB*
IF response ratio	60 dB
Total harmonic distortion	0.5%* (100 mV/m)

GENERAL

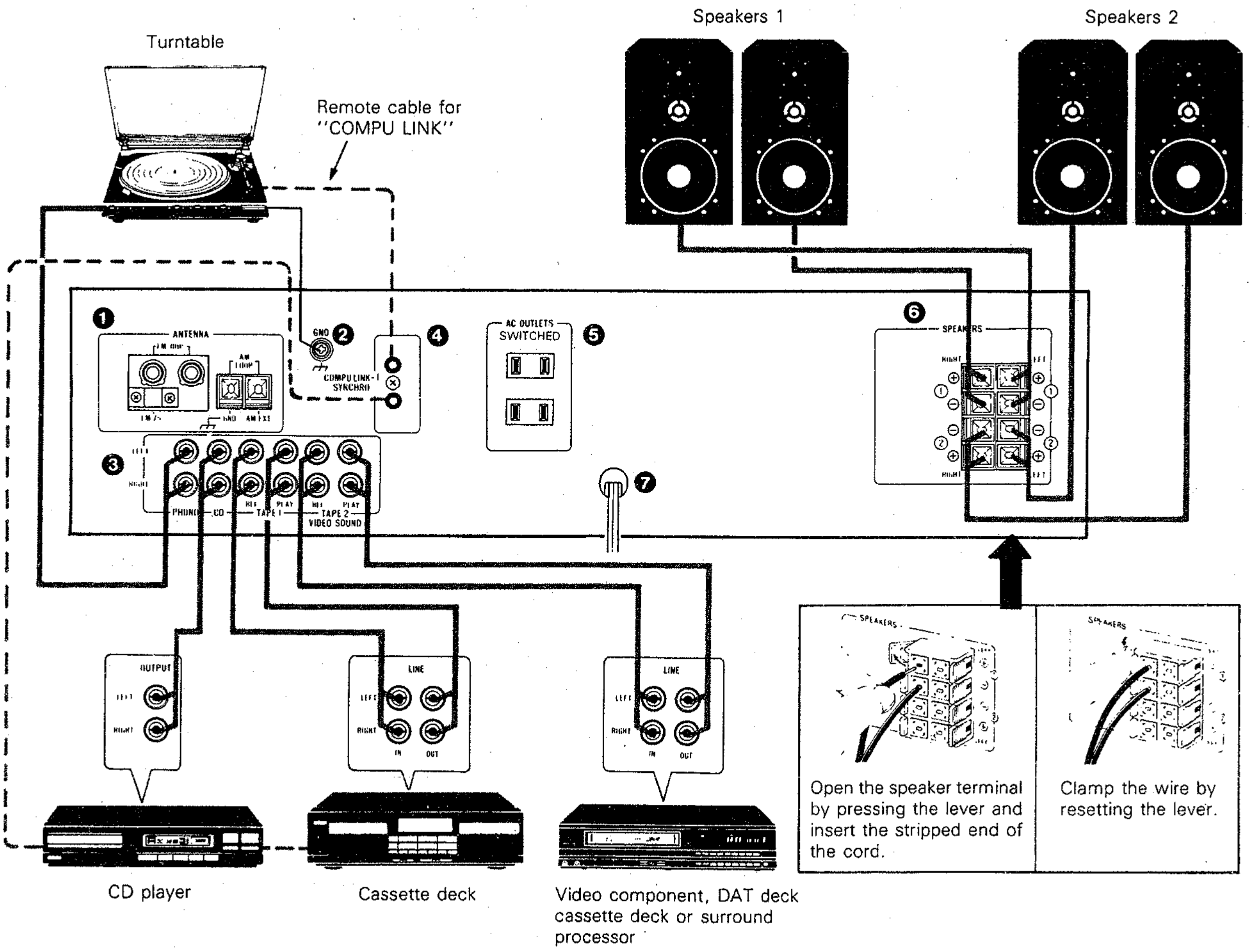
Power requirements	AC 120V∿, 60 Hz
Power consumption	290 watts, 380 VA
Dimensions (W×H×D)	17-3/16″×4-15/16″×13″ (435×125×330 mm)
Weight	17.7 lbs. (8 kg)

* Measured at 1,000 kHz.

Design and specifications subject to change without notice.

Connection Diagram

Switch the power off when connecting any cables.


Speakers 1
Speakers 2
Turntable
Remote cable for "COMPU LINK"
ANTENNA
FM
AM
GND
AM EXT
COMPU LINK-1 SYNCHRO
AC OUTLETS SWITCHED
SPEAKERS
RIGHT
LEFT
LEFT
RIGHT
PHONO
CD
TAPE 1
REC
PLAY
TAPE 2
VIDEO SOUND
OUTPUT
LEFT
RIGHT
LINE
IN
OUT
SPEAKERS
CD player
Cassette deck
Video component, DAT deck cassette deck or surround processor

Open the speaker terminal by pressing the lever and insert the stripped end of the cord.

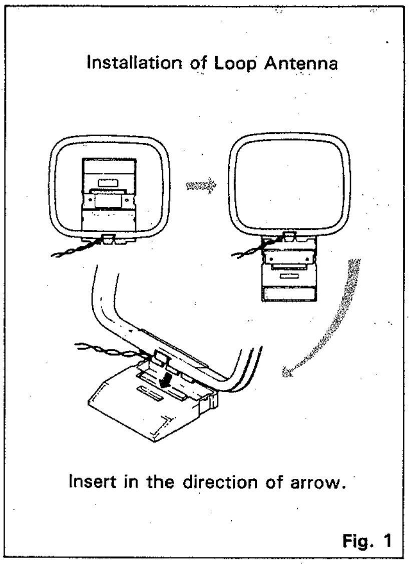
Clamp the wire by resetting the lever.

❶ ANTENNA terminals
❷ GND
❸ PHONO, CD, TAPE 1, TAPE 2/VIDEO SOUND terminals.
❹ COMPU LINK-1/SYNCHRO terminals
Connect to JVC components provided with COMPU LINK-1/SYNCHRO terminals for the COMPU LINK control system funciton.
❺ AC OUTLETS (SWITCHED)
❻ SPEAKERS 1, 2 terminals
❼ Power cord

Notes:

- When connecting components, connect their left and right channels correctly. If channels are reversed, the stereo effect will be degraded.
- Connect speakers with the correct polarity: (+) to (+) and (−) to (−). Reversed polarity will degrade the stereo effect. Be careful to prevent adjacent speaker wires from touching each other.
- Use speakers with the correct impedance. The correct impedance is indicated on the rear panel of the RX-503BK.
- The AC OUTLETS do not supply power when the power switch is turned off. Do not connect equipment requiring more than the outlet's rated value.
- Do not connect the remote cable when connecting the JVC cassette deck having COMPU LINK-1/SYNCHRO terminals to the TAPE2/VIDEO SOUND terminals.
- When a JVC DAT deck having COMPU LINK-1/SYNCHRO terminals is used, be sure to connect it to the TAPE2/VIDEO SOUND terminals and also connect the remote cable.
- Connect a turntables using a moving magnetic (MM) type cartridges to the PHONO terminals.

Antennas


Installation of Loop Antenna

Insert in the direction of arrow.

Fig. 1

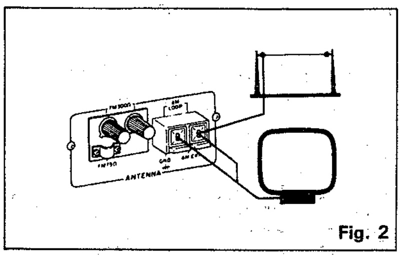

FM 300Ω
AM LOOP
GND
AM EXT
ANTENNA
FM 75Ω

Fig. 2

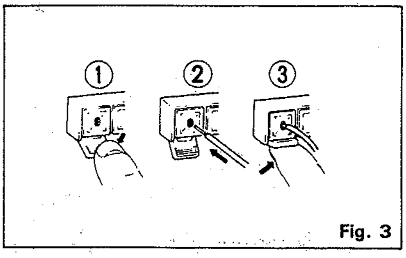


Fig. 3

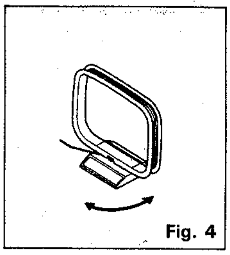


Fig. 4

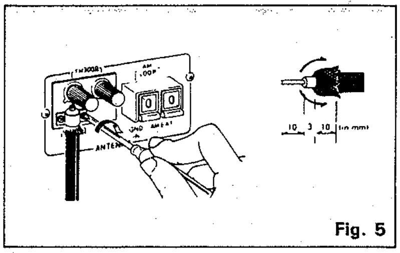

FM 300Ω
AM LOOP
GND
AM EXT
ANTENNA
10
3
10
(in mm)

Fig. 5

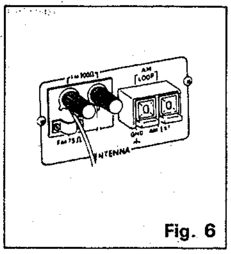

FM 300Ω
AM LOOP
FM 75Ω
GND
AM EXT
ANTENNA

Fig. 6

AM antennas

Figure 1: How to assemble the AM loop antenna

Figure 2: AM loop antenna

This antenna is for the reception of local AM broadcasts.

Figure 2: AM external antenna

If AM reception is unsatisfactory, connect an external AM antenna (single-wire antenna) to the AM ANTENNA terminal.

Figure 3: Connection of AM antenna

① Open antenna terminals levers.
② Plug cords into the terminals.
③ Close the levers.

Figure 4: Noise and interference

Change the direction of the loop antenna, or re-install it in a better position if the reception is noisy.

Notes:

- If the provided loop antenna is not connected or an uninsulated antenna wire touches the rear panel, it will be impossible to receive AM broadcasts.
- When installing an external AM antenna, leave the AM loop antenna connected.

FM antennas

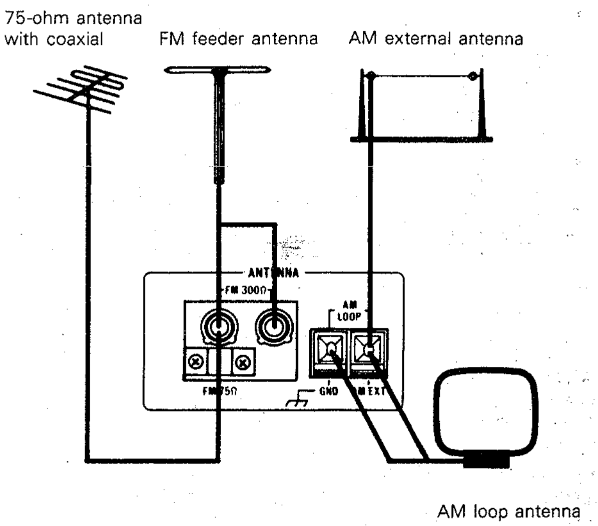
Figure 5: 75-ohm FM antenna with coaxial

Loosen the screws on the bracket and insert the cable through the ring from below. Connect the stripped core to the upper terminal then tighten the ring. The ring is the antenna ground.

Figure 6: FM Feeder antenna

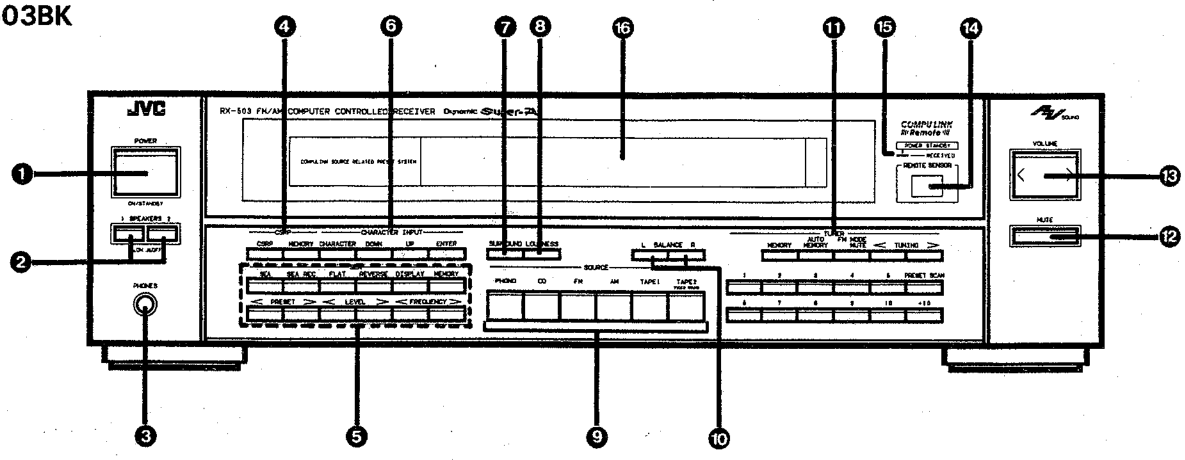
Connect to the 300-ohm terminal. Make sure the feeder antenna wires do not touch any other terminals.

Antenna Connections


75-ohm antenna with coaxial
FM feeder antenna
AM external antenna
ANTENNA
FM 300Ω
AM LOOP
FM 75Ω
GND
AM EXT
AM loop antenna

Front Panel

RX-503BK


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
JVC
POWER
ON/STANDBY
SPEAKERS 1 2
PHONES
RX-503 FM/AM COMPUTER CONTROLLED RECEIVER
CSRP
MEMORY
CHARACTER
DOWN
UP
ENTER
CHARACTER INPUT
SEA
SEA REC
FLAT
REVERSE
DISPLAY
MEMORY
PRESET
LEVEL
FREQUENCY
SURROUND
LOUDNESS
BALANCE
SOURCE
PHONO
CD
FM
AM
TAPE1
TAPE2
TUNER
AUTO MEMORY
FM MODE MUTE
TUNING
PRESET SCAN
COMPU LINK
POWER STANDBY
RECEIVED
REMOTE SENSOR
VOLUME
MUTE

① POWER (ON/STANDBY)
Press this button to turn the power ON. Press again to turn the power off and activate the STANDBY mode. The STANDBY indicator will light.
A small amount of power (5 watts) is consumed in the STANDBY mode. To turn the power off completely, disconnect the power cord from the wall outlet. Preset data is retained in memory while the power cord is plugged into the wall outlet. If the power cord is disconnected or a power failure occurs, data is retained for two or three days.

② SPEAKERS 1, 2
Turns speakers 1 and 2 ON or OFF.

③ PHONES
Plug headphones into this jack. If you want to hear from the headphones alone, turn OFF speakers 1 and 2.

④ CSRP
COMPU LINK SOURCE RELATED PRESET SYSTEM feature

CSRP:	Turns the CSRP feature ON or OFF.
MEMORY:	Stores CSRP data in memory.

⑤ SEA
Use the following keys for the S.E.A. Graphic Equalizer:

SEA:	Turns the S.E.A. ON or OFF.
SEA REC:	Turns S.E.A. recording ON or OFF.
FLAT:	Flattens S.E.A. characteristics.
REVERSE:	Reverses polarity of the S.E.A. characteristics.
DISPLAY:	Displays S.E.A. patterns on the screen.
MEMORY:	Stores an S.E.A. pattern in memory.
PRESET <,>:	Calls an S.E.A. preset pattern.
LEVEL <,>:	Set an S.E.A. level.
FREQUENCY <,>:	Calls a frequency band to correct.

⑥ CHARACTER INPUT
Use the following keys to assign titles or other data to the S.E.A. patterns or to TUNER channels you have preset.

CHARACTER:	Sets the CHARACTER INPUT mode.
DOWN, UP:	Press to select characters (letters, numerals, and symbols).
ENTER:	Store created titles in memory.

⑦ SURROUND
Turns the surround sound effect ON or OFF.

⑧ LOUDNESS
Turns LOUDNESS ON or OFF. The ON position makes up for loss of the human auditory sensation when the sound volume is low.

⑨ SOURCE
Use the following keys to select sources:

PHONO:	Press to listen to records.
CD:	Press to listen to CDs.
FM:	Press to listen to FM broadcasts.
AM:	Press to listen to AM broadcasts.
TAPE 1:	Press to operate the tape deck connected to the TAPE 1 terminals.
TAPE 2/VIDEO SOUND:	Press to operate the tape deck or video equipment connected to the TAPE 2/VIDEO SOUND terminals. (alternates between ON and OFF)

⑩ BALANCE L, R
Adjusts the volume balance between the left and right speakers.

⑪ TUNER
Use the following keys to listen to AM or FM broadcasts:

MEMORY:	Stores an AM or FM frequency (station) on a preset channel.
AUTO MEMORY:	Stores an AM or FM frequency on a preset channel using the AUTO MEMORY feature.
FM MODE/MUTE:	Selects FM reception modes.
TUNING <,>:	Tunes in an AM or FM frequency.
1 − 10, + 10 (Tuner numeric keys):	Press to select preset channels.
PRESET SCAN:	Press to scan preset channels in sequence.

⑫ MUTE
Turns sound ON or OFF temporarily.

⑬ VOLUME < , >
Adjusts the volume of sound from the speakers or headphones.

⑭ REMOTE SENSOR
Receives signals from the remote control unit.

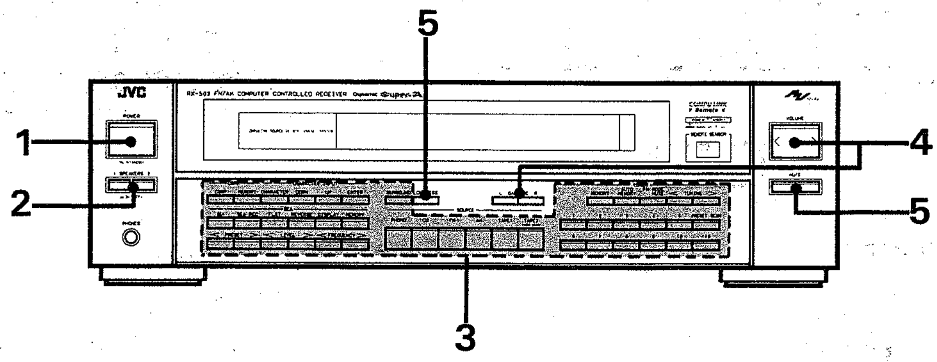
⑮ RECEIVED and POWER STANDBY indicator
Lights when signals are received from the remote control unit or when the machine is in the STANDBY mode.

⑯ Display and indicator
Shows the operating status and the connected COMPU LINK equipment.

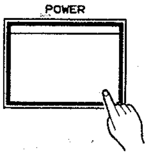
Basic Operation

— Before Operating —

Before plugging the power cord into an AC outlet, check to be sure the individual components are connected correctly.

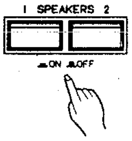

5
1
2
4
5
3
JVC
POWER
PHONES
VOLUME

1. Turn the POWER switch to ON.



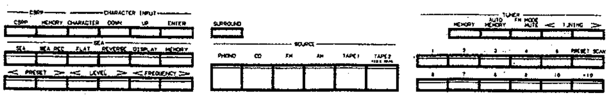
Note:
If a malfunction occurs when the power is ON, unplug the power cord and then plug it in again.

2. Select a speaker system by pressing one of the SPEAKERS keys.

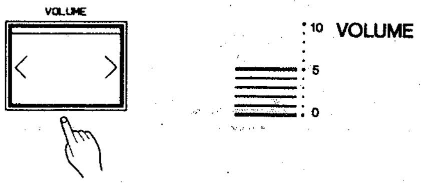

1 SPEAKERS 2
ON OFF

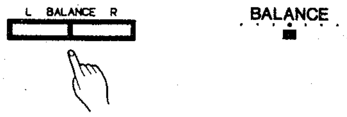
Note:
If speakers are not connected to both SPEAKERS 1 and 2 terminals, do not turn ON both speaker systems as that would suppress sound output.

3. Operate these keys, as needed, by following the directions given further on.


CSRP
CHARACTER INPUT
CSRP
MEMORY
CHARACTER
DOWN
UP
ENTER
SEA
SEA
SEA REC
FLAT
REVERSE
DISPLAY
MEMORY
< PRESET >
< LEVEL >
< FREQUENCY >
SURROUND
SOURCE
PHONO
CD
FM
AM
TAPE1
TAPE2
TUNER
MEMORY
AUTO MEMORY
FM MODE MUTE
< TUNING >
1
2
3
4
5
PRESET SCAN
6
7
8
9
10
+10

4. Adjust the VOLUME and BALANCE keys to your taste.


VOLUME
10
VOLUME
5
0


L BALANCE R
BALANCE

Note:
These keys vary their settings while they are being pressed. The display normally shows VOLUME. It will change to BALANCE for about 5 seconds when the BALANCE keys are pressed.

5. Press the LOUDNESS and MUTE keys as needed.

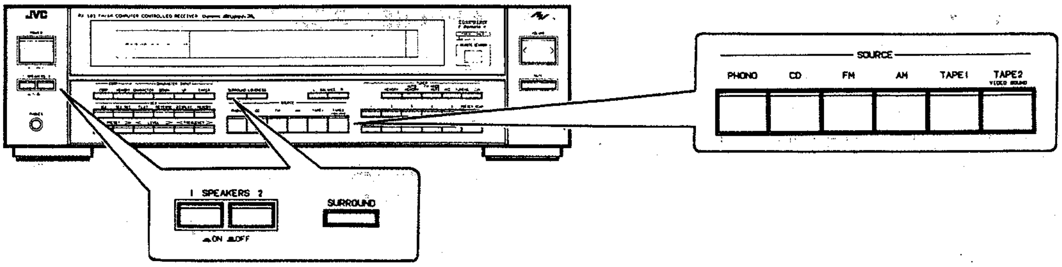
- Press to make up for loss of the human auditory sensation when the sound volume is low.

LOUDNESS
LOUDNESS

- Press to temporarily cancel sound output.

Note:
The MUTE key is reset when the VOLUME or BALANCE keys are pressed.

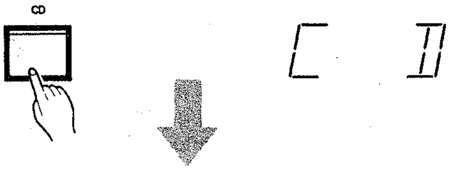
Playing Back Sources (PHONO, CD, TAPE1, TAPE2/VIDEO SOUND)


SOURCE
PHONO
CD
FM
AM
TAPE1
TAPE2
VIDEO SOUND
1 SPEAKERS 2
ON OFF
SURROUND

■ Playing Back Sources

1. Press the SOURCE key for the desired source.
2. Operate the corresponding equipment.

<If you select CD>



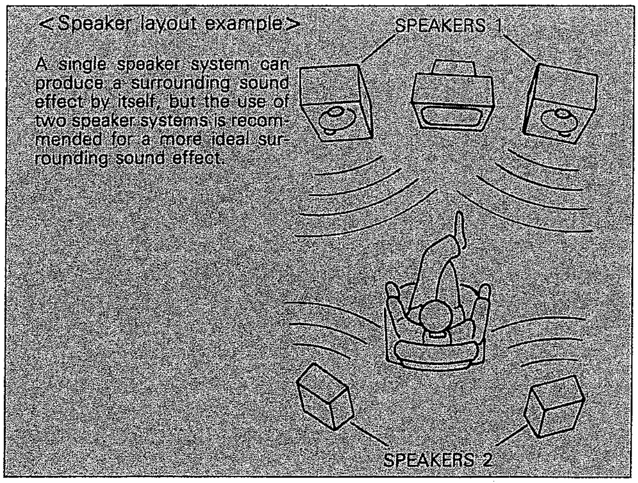
CD player can be operated.

- Pressing the TAPE 2/VIDEO SOUND key will not change the display source indication, but the TAPE 2 MONITOR lights.
  To play another source, press the TAPE 2/VIDEO SOUND key again to turn off the indicator.

Note:
To operate other source equipment, refer to the appropriate instructions.

■ Playing Back with a Surround-sound Effect

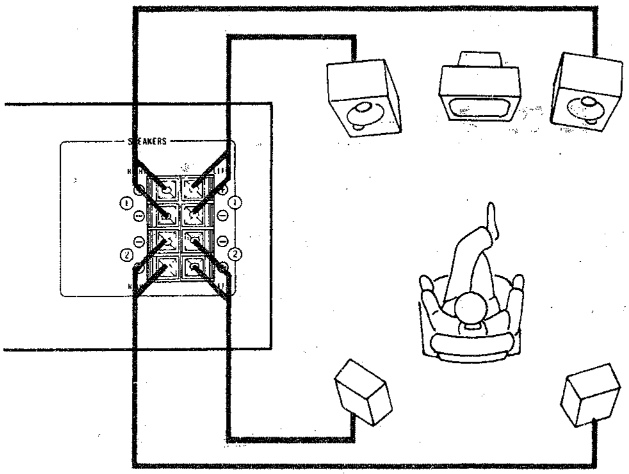
Playing back a stereo source with the SURROUND key ON will produce a surrounding sound effect.


SPEAKERS 1
SPEAKERS 2

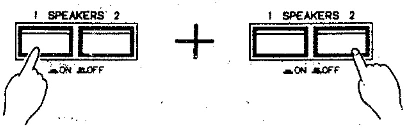
<Speaker layout example>

A single speaker system can produce a surrounding sound effect by itself, but the use of two speaker systems is recommended for a more ideal surrounding sound effect.

1. Connect speaker systems to the SPEAKERS 1 and 2 terminals.


SPEAKERS
①
②

2. Turn ON the SPEAKERS keys, 1 and 2.


1 SPEAKERS 2
ON OFF
+
1 SPEAKERS 2
ON OFF

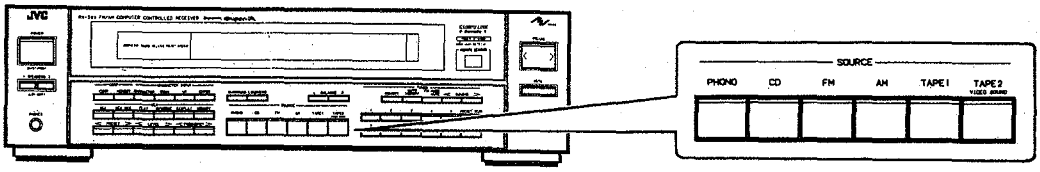
3. Press the SURROUND key.

SURROUND
SURROUND

4. Play back the stereo source.

- If a speaker system with a low-rated input is connected to SPEAKERS 2, avoid using it independent of SPEAKERS 1, and play attention to its VOLUME control during surrounding sound playback.
- Monaural sources cannot be played back with the surround sound effect.

Recording

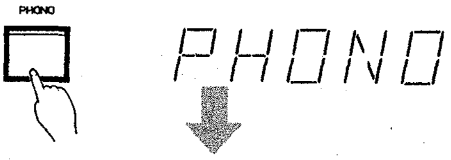


■ Recording

1. Press the SOURCE key for the desired source.

2. *Operate the corresponding source equipment.*

<If you select PHONO>



Turntable and tape deck can be operated.

Notes:
The surround sound is recorded as a normal stereo sound even if it is recorded with the SURROUND key is ON.

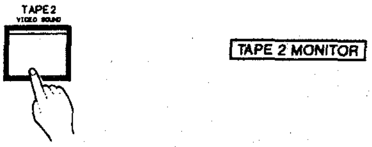
■ Three-Head Tape Decks

If you have a three-head tape deck, you can use it to monitor the sound being recorded. Connect the tape deck to the TAPE 2/VIDEO SOUND terminals and proceed as follows:

1. Start recording the source onto the TAPE 2 deck.

   When the TAPE 2 MONITOR indicator is off, you hear the sound of the source playing through the speakers.

2. Press the TAPE 2/VIDEO SOUND key.



Now you hear the sound of the recording immediately as it is made on the tape.

- By pressing the TAPE 2/VIDEO SOUND key on and off, you can compare the sound quality of the source with the quality of the tape recording being made.

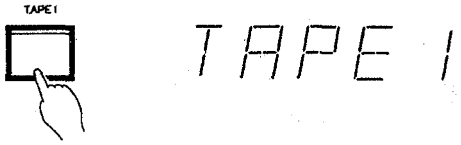
Note:
Set the recording level from the tape deck. It can not be set with the VOLUME control of this machine.

■ Dubbing Tapes

Connect one tape deck to the TAPE 1 terminals, the other tape deck to the TAPE 2/VIDEO SOUND terminals.

<To record from TAPE 1 to TAPE 2/VIDEO SOUND>

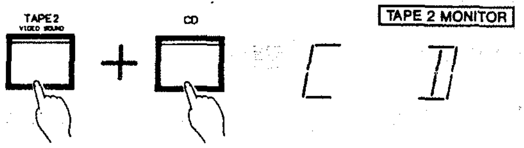
1. Press the TAPE 1 key.



2. Play back the TAPE 1 deck and record with the TAPE 2/VIDEO SOUND deck.

<To record from TAPE 2/VIDEO SOUND to TAPE 1>

1. Press the TAPE 2/VIDEO SOUND key and a SOURCE key other than TAPE 1.



2. Play back the TAPE 2/VIDEO SOUND deck and record with the TAPE 1 deck.

USING THE S.E.A. GRAPHIC EQUALIZER

The S.E.A. Graphic Equalizer breaks down the audible frequency range into seven bands at intervals of 4/3 octave. Each band of tones can be adjusted as disired by the listener (±10dB in steps of 2 dB on the basis of 0dB). Thus allowing you to make the necessary adjustments in the presicely appropriate frequency bands.

***You can customize the sound to your taste.**

***You can correct subtle frequency to suit the acoustic characteristics of your listening room.**

***You can compensate for the conditions of audio equipment.**

Use the following keys for the S.E.A. Graphic equalizer.

ON/OFF:	Turns the S.E.A. Graphic equalizer.
REC:	Turn the S.E.A. recording ON or OFF.
FLAT:	Flatten the S.E.A. characteristics.
REVERSE:	Reverses polarity of the S.E.A. characteristics.
DISPLAY:	Display the current S.E.A. pattern in ascending frequency.
MEMORY:	Stores an S.E.A. pattern in memory.
PRESET <,>:	Calls an S.E.A. preset pattern.
LEVEL <,>:	Set an S.E.A. level.
FREQUENCY <,>:	Calls a frequency band to correct.

S.E.A. preset patterns

A total of 10 preset patterns can be used: 5 programmed preset patterns, and 5 manual patterns which you create (SEA-A through E).

— Program pattern features —

These five S.E.A. patterns were preset at the factory to offer suggested settings for various types of audio programs. Each preset pattern is shown below.

HEAVY:
For music with a heavy beat, such as disco music.

CLEAR:
For crisp, clear sound with transparent highs.

SOFT:
For background music, at low volume level.

MOVIE:
For TV, VCR, and videodisc sound.

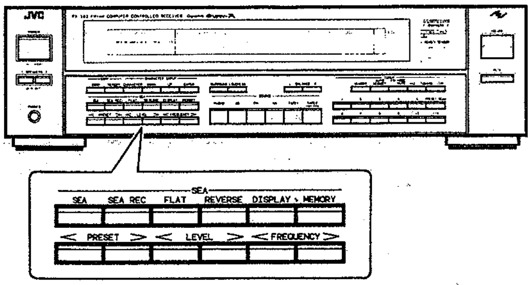
VOCAL:
For music that is chiefly vocal, or speech.

- After recalling these pattern, you can further change each frequency band to suit yourself. However, since they are representative patterns, the original, stored pattern will be unchanged.

S.E.A. recording

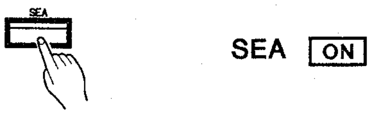
The sound corrected by S.E.A. can be recorded on the tape deck connected to the TAPE 1 terminals.

- The SEA REC key is not functional when the SEA ON/OFF key is OFF, or SURROUND ON/OFF keys is ON.

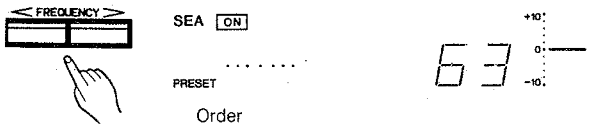


■ Creating an S.E.A. pattern

1. Press the SEA key.



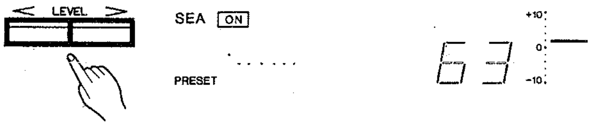
2. Press the FREQUENCY keys to call the desired frequency.



Order

[63Hz]—[160Hz]—[400Hz]—[1kHz]
[2.5kHz]—[6.3kHz]—[16kHz]

3. Press the LEVEL keys to adjust the S.E.A. level.

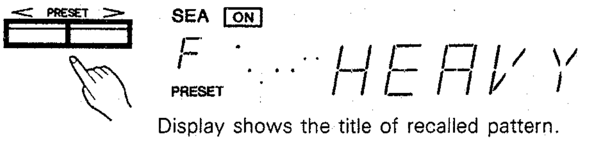


Repeat Step 1～3 for each additional frequency desired.

Note:
When a frequency has been called, press the LEVEL keys while the frequency is displayed (about 5 seconds). If the display is cleared before you press the LEVEL keys, it can be recalled by pressing either FREQUENCY key.

■ Recalling a preset pattern

1. Press the SEA key.
2. Call a preset pattern with the PRESET keys.



Display shows the title of recalled pattern.

Order

< PRESET >

"SEA"—[SEA-A]—[SEA-B]—[SEA-C]—[SEA-D]
[SEA-E]—[HEAVY:F]—[CLEAR:G]
[SOFT:H]—[MOVIE:I]—[VOCAL:J]

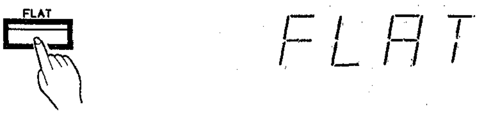
- SEA Recording

SEA REC
SEA ON REC
A
PRESET

Operate the recording procedure as instructed in "recording".

S.E.A. recording is not available with the tape deck connected to the TAPE 2 terminals.

- Flatten the SEA characteristics.



Pressing the FLAT key while a pattern is yet to be preset will clear it. Be careful not to press the FLAT key inadvertently.

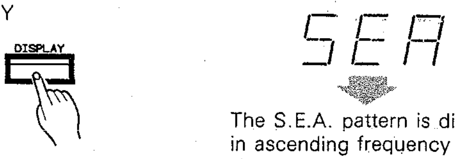
- REVERSE

REVERSE
SEA

The S.E.A. pattern is displayed in ascending frequency after this display.

Press again to return to the original polarity.

- DISPLAY

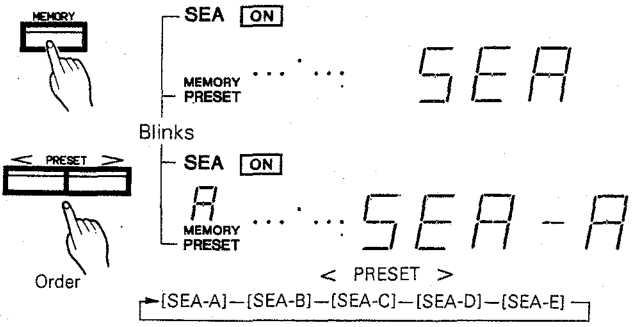


The S.E.A. pattern is displayed in ascending frequency order (for a preset pattern, its title).

To stop the display, press DISPLAY key again.

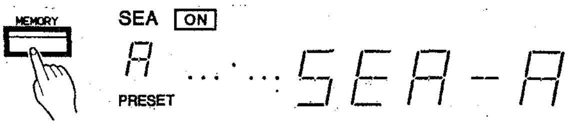
■ Presetting Manual Patterns

1. Create an S.E.A. pattern to preset as instructed in "Creating an S.E.A. pattern".
2. Press MEMORY key to light its indicator. Call one of the patterns to store (SEA-A through E) by pressing the PRESET keys while the indicator is on (about 5 seconds).



Note:
Press the MEMORY key again if the indicator turns off before you press the PRESET keys.

3. Press the MEMORY key again while the indicator is on (about 5 seconds). Memory presetting is complete when the MEMORY indicator turns off.



The preset SEA patterns can each be given a four-character title. See the section "Entering Characters" for futher details.

- **The reverse feature** offers you a noise reduction effect during tape recording. First, record sources with emphasis on high-pitched tones by using SEA; during playback, activate reverse SEA, to cut hissing noise inherent in tape recording.
- **The S.E.A. ON/OFF key** enable you to compare the sound corrected by S.E.A. with the original (not corrected) sound during procedure creating S.E.A. pattern. Pressing the ON/OFF key to turn the S.E.A. OFF offers you the sound not corrected. When press ON/OFF key again the S.E.A. pattern being created could be recalled, and corrected sound would be heard.
  *Because pressing the FLAT key while a pattern yet to be preset will clear it, be sure to use ON/OFF key.

Frequency band responses

63 Hz: Raise to emphasize the very low base response of organs, drums, and contrabass. When de-emphasized, eliminated unclear response at low frequencies.

160 Hz: Emphasize to obtain a more expanded low sound. De-emphasize to eliminate unclear sound caused by large or nearly empty listening rooms.

400 Hz: This frequency range is the base on which music is constructed. Emphasize to put real punch in your music.

1 kHz: Most effective in emphasizing or de-emphasizing the human voice.

2.5 kHz: the human hearing is most sensitive to this freuqncy. If the music sounds hard or metallic, de-emphasize it.

6.3 kHz: this frequency band varies the tonal expression, influencing the subtleties of the music.

16 kHz: Boosting this frequency range suitably adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing manner, and provides a feeling of extension.

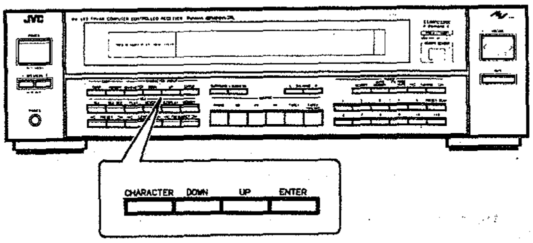
Preset Pattern Frequency Responses (Unit: dB)

Frequency band / Preset pattern	63Hz	160Hz	400Hz	1kHz	2.5kHz	6.3kHz	16kHz
HEAVY	+10	+2	−2	0	0	+2	+4
CLEAR	+4	−4	0	+4	+2	+4	+6
SOFT	+2	0	0	0	0	−2	−6
MOVIE	+6	+2	0	0	−2	0	+2
VOCAL	−2	−2	+2	+4	+2	0	+2
SEA-A							
SEA-B							
SEA-C							
SEA-D							
SEA-E							

Note: To assign titles to the preset patterns, see "Entering Characters".

Entering Characters

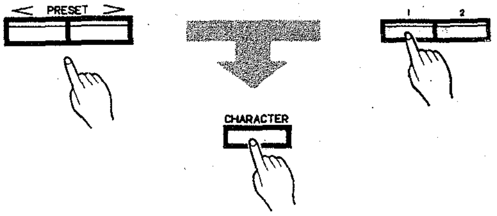
A four-character title or station name can be assigned to each S.E.A. preset pattern (SEA A to E) or TUNER preset channel (CH 1 to 20).


JVC
CHARACTER
DOWN
UP
ENTER

1. Specify a S.E.A. manual preset pattern (SEA A through E using the keys PRESET <and>), or a TUNER preset channel (using the numeric keys). Press the CHARACTER key.

<To specify a S.E.A. pattern>
Use the S.E.A. PRESET keys, <and>.

<To specify a Tuner Preset Channel>
Use the numeric keys.

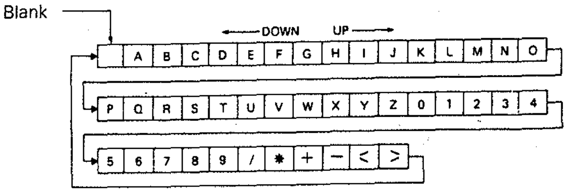

PRESET
<
>
1
2
CHARACTER

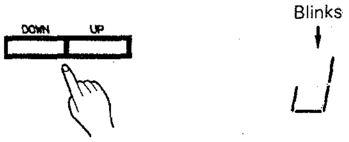
The cursor at the left blinks.
If a character has already been entered, the character blinks.

Note:
For details on S.E.A., see "Using the S.E.A. Graphic Equalizer."
When a preset S.E.A. pattern has been called, press the CHARACTER key while the pattern is displayed (about 3 seconds). If the display is cleared before you press the CHARACTER key, press either PRESET key.

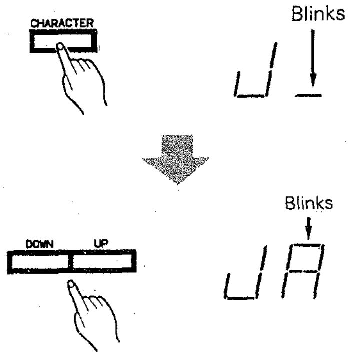
2. Select the appropriate characters with the UP and DOWN keys.

Alphanumeric character order.


Blank
DOWN
UP
A B C D E F G H I J K L M N O
P Q R S T U V W X Y Z 0 1 2 3 4
5 6 7 8 9 / * + − < >

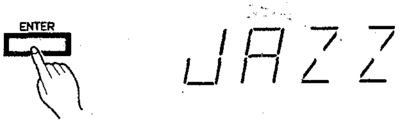

DOWN
UP
Blinks
J

3. Press the CHARACTER key to move to the next position. Repeat steps 2 and 3 to enter up to 4 characters.


CHARACTER
Blinks
J
DOWN
UP
Blinks
JA

- To alter the characters, move the blinking cursor to the desired character for correction using the CHARACTER key.

4. When the entry is complete, press the ENTER key to store it in memory.



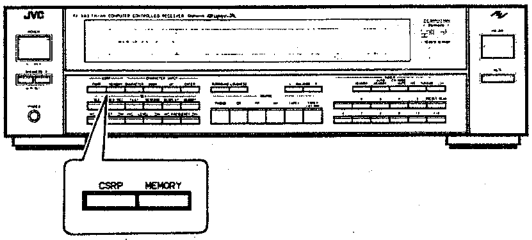
Running the CSRP (Compu Link Source Related Preset System) Feature

CSRP is the state-of-the-art electronic feature that presets volume, balance, and other control settings. This was previously done manually each time a different source was played back. This feature lets you invoke preset control settings by simply pressing a SOURCE keys without repeating many settings each time sources are changed.

The following controls can be preset on each SOURCE key (except TAPE 2/VIDEO SOUND):

•VOLUME	•S.E.A. preset pattern
•BALANCE	•LOUDNESS ON/OFF
•SEA ON/OFF	•SURROUND ON/OFF

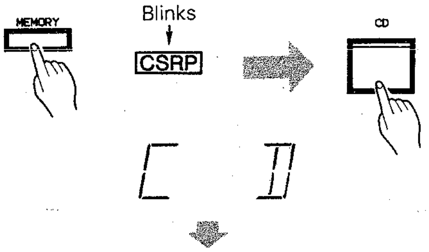
■ Operation



- Before proceding, set the preset state.

1. Press the MEMORY key to blink its indicator. Press the SOURCE key for the source to be preset (PHONO, CD, FM, AM, or TAPE 1) while the indicator is blinking (about 5 seconds).

Repeat this operation for each additional source to be preset.

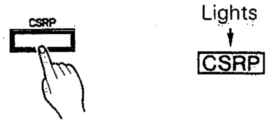


When the presetting is complete, the display will show preset data in the following order with the indicator blinking rapidly:

VOLUME, LOUDNESS ON/OFF→BALANCE, LOUDNESS ON/OFF
→SEA (ON/OFF, preset pattern), SURROUND ON/OFF

Note:
Press the MEMORY key again if the indicator stops blinking before you press a SOURCE key.
Sources can be preset regardless of whether the CSRP key is ON or OFF, but when a source is to be preset with the CSRP key OFF, do not turn it ON until the presetting is complete. If the CSRP key were turned ON before the presetting is complete, the current data settings would be recalled to override the presetting in progress.
Even with the SEA key ON, the SEA PRESET indicator will blink when the MEMORY key is pressed if an S.E.A. preset pattern has not been previously selected. In this case, select an S.E.A. preset pattern and retry this operation.
Sources cannot be preset on the TAPE 2/VIDEO SOUND key.

2. When the CSRP key is ON, data settings on each corresponding SOURCE key recall preset by selecting the source.



- When the CSRP key is turned ON or when the power is switched on with the CSRP key ON, the display will show the data settings on the currently selected SOURCE key in sequence with the indicator blinking rapidly. The blinking indicator changes to a continuously lit state when the display is complete. Subsequently, a similar display occurs each time an additional source is selected.

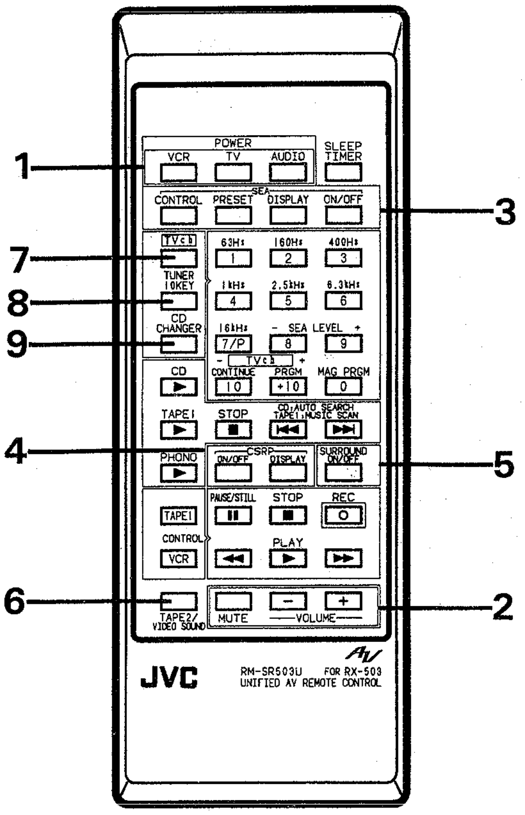
Note:
Though data settings as recalled can be changed with control keys as usual, preset data cannot be altered. To alter preset data, perform the operation described in 1.

■ CSRP DISPLAY

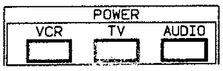
Press the CSRP DISPLAY button on the remote control unit to confirm CSRP data settings presetted in the current source. This operation does not turn on or off CSRP.

Operation with the Remote Control Unit

- **Aim the signals at the REMOTE SENSOR on the RX-503BK**


1
7
8
9
4
6
3
5
2
POWER
VCR
TV
AUDIO
SLEEP TIMER
SEA
CONTROL
PRESET
DISPLAY
ON/OFF
TV/CD
TUNER 1 OKEY
CD CHANGER
63Hz
160Hz
400Hz
1kHz
2.5kHz
6.3kHz
16kHz
- SEA LEVEL +
1
2
3
4
5
6
7/P
8
9
CD
CONTINUE
PRGM
MAG PRGM
10
+10
0
TAPE I
STOP
CD AUTO SEARCH
TAPE I MUSIC SCAN
PHONO
CSRP
ON/OFF
DISPLAY
SURROUND ON/OFF
PAUSE/STILL
STOP
REC
TAPE I
CONTROL
VCR
PLAY
TAPE2/ VIDEO SOUND
MUTE
VOLUME
JVC
RM-SR503U FOR RX-503
UNIFIED AV REMOTE CONTROL

1. Using the POWER keys


POWER
VCR
TV
AUDIO

- AUDIO
  Press to change the power for the RX-503BK to ON or STANDBY.
- TV
  Press to change the TV power to ON or OFF.
- VCR
  Press to change the VCR power to ON or OFF.

2. Using the VOLUME and MUTE keys

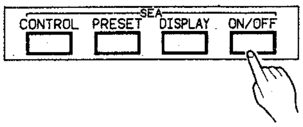
MUTE
−
+
VOLUME

- VOLUME [−] , [+]
  Adjust the volume by processing the minus [−] key to lower the sound and the plus [+] key to raise the sound.
- MUTE
  Press ON to turn off the sound temporarily. Press again to OFF, or operate the VOLUME key, to turn on the sound again.

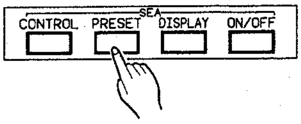
- The RM-SR503U remote control units control the RX-503BK and JVC's audio visual gear from a remote place via the Compu Link Remote Control System.
- Direct the transmitter window of the remote control unit at target equipment within a distance of 7 meters. Take care to avoid obstacles between the transmitter and the target. Press keys slowly and positively, making sure the desired functions result.
- The key markings on the transmitter may not match those on the equipment. Check the markings.
  The remote contrl unit cannot control equipment functions they do not support. Older equipment may not be receptive to their input.
- Check for connection of the COMPU LINK-1/SYNCHRO terminals on the remote equipment by a remote cable.
- The operation of each key on the remote control unit is clearly displayed on the RX-503BK.
  For specific procedures, refer to the instructions for the particular equipment.
- Switch on the power to all the equipment required before starting operation. The POWER key on the RM-SR503U can switch on the power to the AUDIO (RX-503BK), TV and VCR.

3. Using the S.E.A. graphic equalizer

1. Press the SEA ON/OFF key.


SEA
CONTROL
PRESET
DISPLAY
ON/OFF

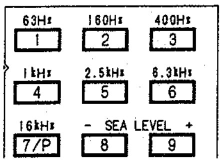
2. Select a pattern with the SEA PRESET key.


SEA
CONTROL
PRESET
DISPLAY
ON/OFF

The pattern will change in the following order each time the SEA PRESET key is pressed.

[SEA-A]→(SEA-B]→[SEA-C]→[SEA-D]→[SEA-E]→[HEAVY:F]→[CLEAR:G]→[SOFT:H]→[MOVIE:I]→[VOCAL:J]

3. To correct a level at the desired frequency band, press the SEA CONTROL key, call the frequency with the 63 Hz to 16 Hz keys, and correct the frequency with the SEA LEVEL −, + keys.


63Hz
160Hz
400Hz
1
2
3
1kHz
2.5kHz
6.3kHz
4
5
6
16kHz
- SEA LEVEL +
7/P
8
9

4. Press the SEA DISPLAY key and the current S.E.A. patern will be displayed in ascending frequency order.

Note:
Refer to the section "Using the S.E.A. graphic equalizer"

4. Using the CSRP keys

CSRP
ON/OFF
DISPLAY

- ON/OFF
  Press to turn the CSRP feature ON or OFF.
- DISPLAY
  Press to display the current CSRP setting.
  (This operation does not turn on or off CSRP.)

5. Play back with a surround-sound effect.

SURROUND ON/OFF

- SURROUND ON/OFF
  Press to get sorround playback. Press again to turn off.

6. Using the TAPE 2/VIDEO SOUND key

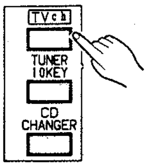
TAPE2/
VIDEO SOUND

Press when you want to play back or monitor the recording on a tape deck connected to the TAPE 2/VIDEO SOUND terminals or when you want to play back a tape on video equipment.

7. Selecting the TV Channel

Aim signals at the TV

1. Press the [TV ch] ☐ key to set numeric keys in the TV ch mode (1 ~ 9,0 and [TV ch] −, +).

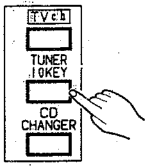


The numeric keys and the [TV ch] −, + keys enter the TV channel mode.

2. Select a TV channel with the numeric keys (1 – 9,0) or the TV ch −, + keys.
   - The numeric keys vary in operation from one type of TV to another. Read the instructions accompanying the particular TV.

8. Listening to FM/AM Broadcasts

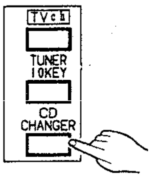
1. Press the TUNER 10 KEY ☐ key to set numeric keys in the TUNER preset channel number mode.



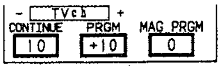
2. Use the numeric keys (1 ~ 10, + 10) to select the preset channel on the TUNER. The numeric keys are used in the same way as the TUNER numeric keys on the equipment.
   For reference, see "Listening to AM or FM Broadcasts" page 8.

9. Using the CD Auto-changer

1. Press the CD CHANGER ☐ key to set numeric keys in the CD Auto-changer mode (disc number 1 ~ 7/P, and play mode).



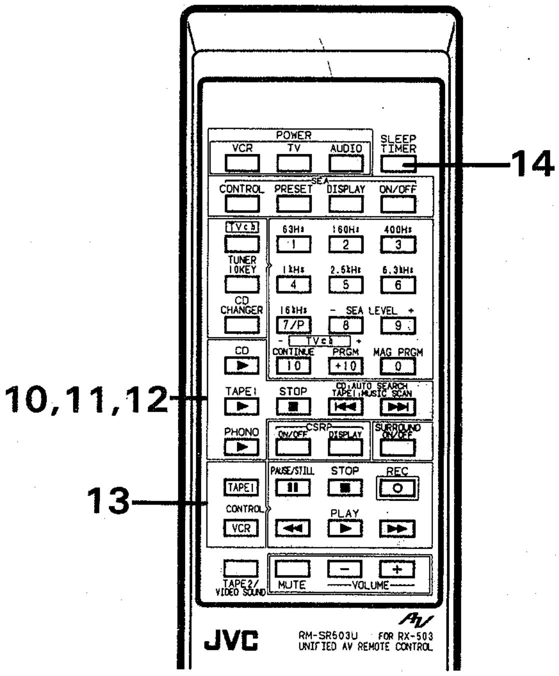
2. Select a play mode by pressing the CONTINUE, PRGM, or MAG. PRGM key.
   CONTINUE: Play CDs in sequence.
   PRGM: Play a CD in a programmed sequence.
   MAG.PRGM: Play a magazine program.



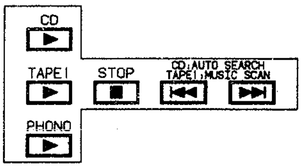
3. Use the numeric keys (1 ~ 7/P) to select the disc number.
   - You must press the CD ▶ key first, if you wish to use the Numeric keys in the CD track number mode.

   The numeric keys and play modes vary in function from one type of CD auto-changer to another. Be sure to read the CD autochanger's instruction.

Operation with the Remote Control Unit

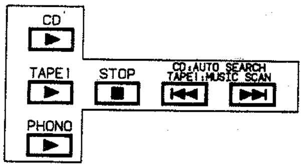

POWER
VCR
TV
AUDIO
SLEEP TIMER
14
CONTROL
PRESET
SEA
DISPLAY
ON/OFF
TV ch
63Hz
160Hz
400Hz
1
2
3
TUNER 10KEY
1kHz
2.5kHz
6.3kHz
4
5
6
CD CHANGER
16kHz
- SEA LEVEL +
7/P
8
9
- TV ch +
CONTINUE
PRGM
MAG PRGM
CD
10
+10
0
10,11,12
TAPE1
STOP
CD:AUTO SEARCH TAPE1:MUSIC SCAN
PHONO
CSR
ON/OFF
DISPLAY
SURROUND ON/OFF
13
TAPE1
PAUSE/STILL
STOP
REC
CONTROL
PLAY
VCR
TAPE2/ VIDEO SOUND
MUTE
VOLUME
JVC
RM-SR503U FOR RX-503
UNIFIED AV REMOTE CONTROL

10. Listening to CDs


CD
TAPE1
STOP
CD:AUTO SEARCH
TAPE1:MUSIC SCAN
PHONO

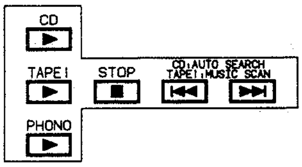
1. Press the CD ▶ key to start playing a CD.
   (This key also changes the numeric key to the CD track number mode.)
2. Use the numeric key to select track number.
3. Use the AUTO SEARCH ⏮ and ⏭ keys to go to the beginning of other tracks.
   ⏮: Skips to the beginning of the previous track.
   ⏭: Skips to the beginning of the next track.
4. Press the STOP ■ key to stop the CD.

11. Using a Cassette Deck (TAPE1)


CD
TAPE1
STOP
CD:AUTO SEARCH
TAPE1:MUSIC SCAN
PHONO

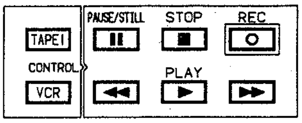
1. Press the TAPE1 ▶ key to start the cassette deck.
2. Use the MUSIC SCAN ⏮ and ⏭ keys to go to the beginning of other tunes.
   ⏮ : Skips to the beginning of the previous track.
   ⏭ : Skips to the beginning of the next track.
3. Press the STOP ■ key to stop the CD.

12. Listening to Records


CD
TAPE1
STOP
CD:AUTO SEARCH
TAPE1:MUSIC SCAN
PHONO

1. Press the PHONO ▶ key to start playing a record.
2. Press the STOP ■ key to stop the records.

13. Using the control keys


TAPE1
PAUSE/STILL
STOP
REC
CONTROL
PLAY
VCR

1. Press TAPE1 or VCR key to select the equipment you wish to operate.
2. Use the TAPE1, or VCR control keys to select the operation you wish.

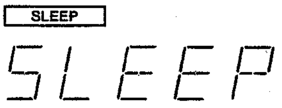
PAUSE/STILL (II):	Stops play back, sound recording, and video recording temporarily. Press the PLAY key to release this control.
STOP (■):	Stops the operation selected.
REC (○):	Starts sound and video recording when pressed together with the PLAY key. When pressed together with the PAUSE/STILL key, sound and video recording are placed in standby.
PLAY (▶):	Plays the tape.
REW (◀◀):	Fast winds the tape in a cassette deck to the left. Rewinds the VCR tapes.
FF (▶▶):	Fast winds the tape in a cassette deck to the right. Fast forwards the VCR tapes.

- Use the remote controller pointed at the VCR.

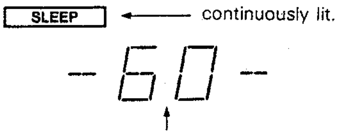
14. Using the Sleep Timer

The sleep timer shuts off the RX-503BK (to enter the STANDBY mode) when the preset time intervals have elapsed.

1. Press the SLEEP TIMER key to set the timer setting mode.


SLEEP
SLEEP

2. Each time the SLEEP TIMER key is pressed subsequently, the timer can be set up to 80 minutes, in 10-minute multiples.



continuously lit.

turn off after about 5 seconds.

3. After the minute display turns off, press the SLEEP TIMER key once more to display the remaining time in minutes.

Replacement Procedures

Removing the top cover

1 Remove six screws fixing the top cover (four screws on the both sides and two on the rear side.)
2 Dismount the top cover by slightly opening its sides and lifting the rear.

Removing the Front Panel

1 Remove the top cover. (Refer to the above item.)
2 Remove three plastic rivets (A) on the upper part of the front panel and three screws (B) from the lower part. (Fig.1)

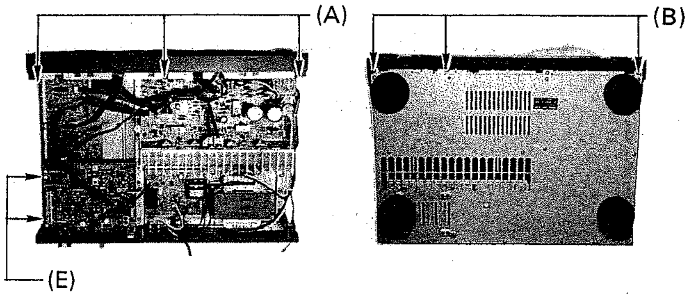


Fig. 1

Removing the Front Switch PCB

1 Remove the Front Panel. (Refer to the above item.)
2 Remove four screws (C) from Front SW PCB.
3 Remove the connecters to separate Front SW PCBs from FL PCB.(Fig.2)

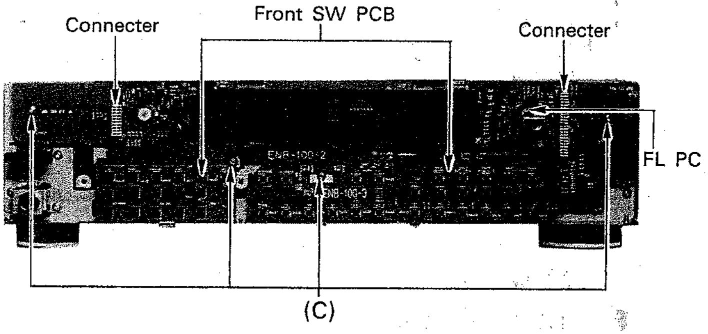


Fig. 2

Removing the FL PCB

1 Remove the.Front SW PCBs. (Refer to the above item.)
2 Remove two screws (D).
3 Pull up the left side of the FL PCB slightly towards you , and lift up it.(Fig.3)

Removing the Tuner PCB

1 Remove the top cover. (Refer to the above item.)
2 Remove two screws (E) fixing the chassis.(Fig.1)
3 Remove four screws (F) fixing the rear side. (Fig.4)

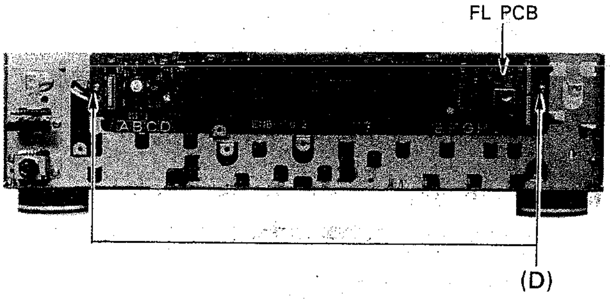


Fig. 3

Removing the Power Transistor

1 Remove the top cover. (Refer to the above item.)
2 Demount the bottom cover by removing 14 screws from the bottom.
3 Unsolder the power transistor.
4 Remove the screws holding the power transistors using a wrench having a diagonal length 5.5 mm.

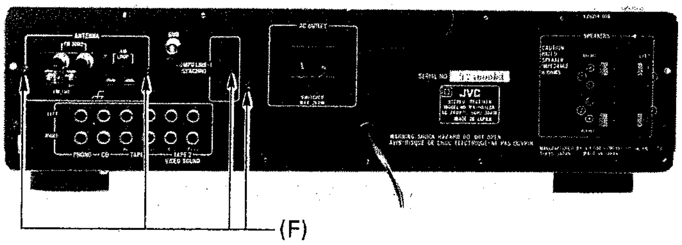
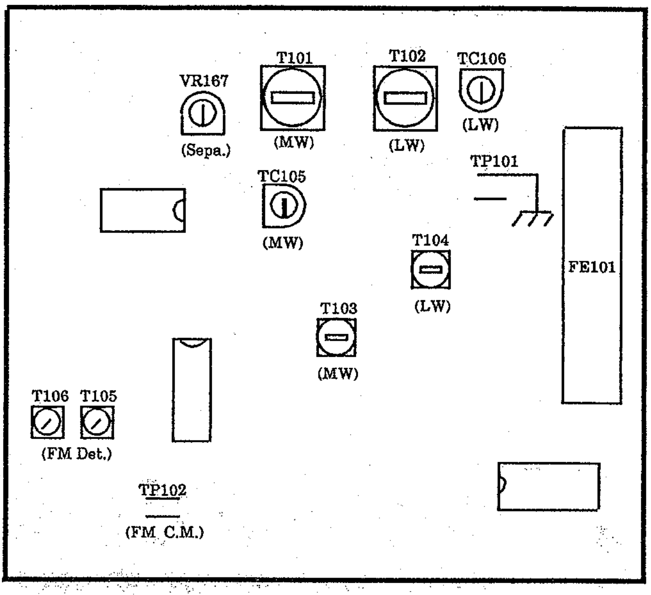


Fig. 4

FM/AM Tuner Alignment Procedures



1. FM section

■ FM oscillator

(1) Set the frequency display to "108.0MHz".
(2) Confirm the FM inter-station noise is received.
(3) Confirm the voltage of test point "TP101" becomes 8.0V ± 2.0V.
(4) Set the frequency display to "87.5MHz" and confirm the voltage of test point "TP101" becomes 1.6V ± 1.0V.

■ FM detector coil : T105, T106

(1) Connect a digital voltmeter to test point "TP 102", and receive to "100.1MHz" signal with SSG ATT 70dB.
(2) Adjust T105 so that the digital voltmeter reads 0 ± 1.5mV.
(3) At the same time, Adjust T106 so that the distortion of the output is minimised.

■ FM separation : VR167

(for Continental Europe, West Germany, Australia and the U.K.)

(1) Receive a stereo signal
(2) Adjust VR167 so that the channel separation becomes maximum.

2. MW section

Note : [ ] : for the U.S.A. and Canada
( ) : Australia, the U.K. and Continental Europe
{ } : Other countries Channel space 9KHz
「 」: Other countries Channel space 10KHz

■ MW oscillator : T103

(1) Set the frequency display to [530KHz] (522KHz) {531KHz} 「 530KHz 」 and confirm the voltage of test point TP101 becomes 0.9V ± 0.2V .
(2) Set the frequency display to [1710KHz] (1629KHz) {1602KHz } 「 1600KHz 」 and confirm the voltage of test point TP101 becomes [8.0V ± 0.8V] (7.5V ± 0.8V) { 7.2V ± 0.7V } 「 7.2V ± 0.7V 」.
(3) If its voltage exceeds the allowance, adjust T103 to obtain the voltage.

■ MW antenna coil : T101

(1) Connect a loop antenna to the "AM Loop" terminal on the rear panel.
(2) Adjust T101 to obtain the best receiving sensitivity on 600KHz or 603KHz.

■ MW antenna trimmer : TC105

(1) Adjust TC105 to obtain the best receiving sensitivity on 1400KHz or 1404KHz.

3. LW section (for RX-503LBK)

Note : [ ] for Italy

■ LW oscillator : T104

(1) Set the frequency display to 144KHz and adjust T104 so that the voltage of TP101 becomes 0.8V ± 0.4V [0.8V ± 0.1V].
(2) Set the frequency display to 353KHz [290KHz] and confirm the voltage of test point TP101 becomes 7.7V ± 0.6V [5.7V ± 0.5V].

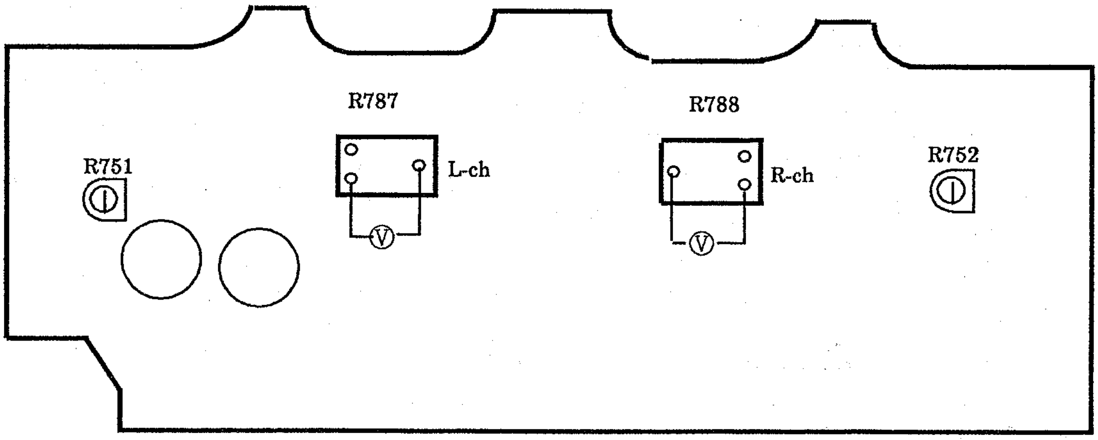
■ LW antenna coil : T102

(1) Connect a loop antenna to the "AM Loop" terminal on the rear panel.
(2) Adjust T102 to obtain the best receiving sensitivity on 164KHz [164KHz].

■ MW antenna trimmer : TC106

(1) Adjust TC106 to obtain the best receiving sensitivity on 353KHz [245KHz].

Power Amplifier Adjustment Procedures



■ Idling Current

(1) Turn R751and R752 fully counterclockwise before the power switch on.
(2) Warm up at least 5 minutes before adjustment.
(3) Must keep the heatsink to prevent overheating before adjustment.
(4) Set the volume control to minimum during this adjustment.
(5) Connect a DC voltmeter to R787 resistor's leads for left channel, or to R788 for right channel.
(6) Adjust R751 for left channel, or R752 for right channel, so that the DC voltmeter becomes 2mV ~ 7mV.

Description of Major ICs

■ MN178122JNE : IC401 (System control & FL Driver)

1. Terminal Layout

Vdd	1	64	OSC 1
NC	2	63	OSC 2
NC	3	62	Vss
NC	4	61	X1
NC	5	60	X2
NC	6	59	POWER
G14	7	58	TUNER RESET
G13	8	57	TUNER HOLD
G12	9	56	TUNER MUTE
G11	10	55	
G10	11	54	
G9	12	53	
G8	13	52	
S1	14	51	
S2	15	50	
S3	16	49	SURROUND
S4	17	48	STANDBY/RECEIVED
Vpp	18	47	
S5	19	46	
S6	20	45	INH IN
S7	21	44	REMOTE IN
S8	22	43	RESET IN
S9	23	42	DCS OUT 1
S10	24	41	SEA CLK
S11	25	40	SEA DATA
S12	26	39	STB
S13	27	38	DATA
S14	28	37	DCS IN 1
S15	29	36	CLK
NC	30	35	TEST
KEY IN0	31	34	KEY IN3
KEY IN1	32	33	KEY IN2

2.Table of Key Matrix

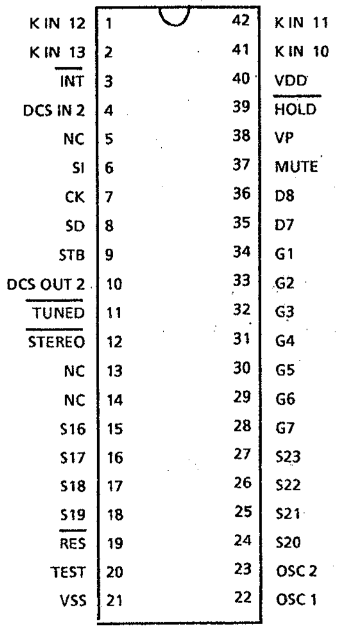
DIGIT / PIN NO. IN	31 (K-IN0)	32 (K-IN1)	33 (K-IN2)	34 (K-IN3)
13 (K-OUT1)	POWER	MUTING	LOUDNESS	SURROUND
12 (K-OUT2)	BALANCE L	BALANCE R	VOLUME DOWN	VOLUME UP
11 (K-OUT3)	PHONO	CD	TAPE 1	TAPE 2
10 (K-OUT4)	CSRP	CSRP MEMORY		
9 (K-OUT5)	CHARACTER	CHARACTER	CHARACTER	ENTER
8 (K-OUT6)	FLAT	REVERSE	SEA MEMORY	SEA DISPLAY
7 (K-OUT7)	FREQ -	FREQ +	SEA REC	SEA
6 (K-OUT8)	LEVEL -	LEVEL +	PRESET -	PRESET +

3. Pin Functions

Pin No.	Name	I/O	Functions and descriptions
1	Vdd	—	+5V
2,3	NC	—	NON CONNECTION
4,5	G16~G18	O	FL DIGIT DRIVER
6~13	G15~G8	O	FL DIGIT DRIVER AND KEY MATRIX OUTPUT
14~17	S1~S4	O	FL SEGMENT DRIVER
18	Vpp	—	-30V
19~30	S5~S16	O	FL SEGMENT DRIVER
31~34	K-IN0~K-IN3	I	KEY MATRIX INPUT
35	TEST	—	TEST MODE INPUT (CONNECT TO GND).
36	CLK	O	SERIAL CLOCK OUTPUT TO IC321:TC9164N AND IC361:TC9177P
37	DCS IN 1	I	COMPULINK SIGNAL INPUT
38	DATA	O	SERIAL DATA OUTPUT TO IC 321:TC9164N AND IC361:TC9177P
39	STB	O	STROBE OUTPUT TO IC321:TC9164N AND IC361:TC9177P
40	SEA DATA	O	SEA DATA OUTPUT TO IC504:LC7522
41	SEA CLK	O	SEA CLK OUTPUT TO IC504:LC7522
42	DCS OUT1	O	COMPULINK SIGNAL OUTPUT
43	RESET IN	I	RESET SIGNAL INPUT
44	REMOTE IN	I	REMOTE CONTROLE SIGNAL INPUT
45	INH IN	I	POWER ON/OFF DETECTION
46,47	—	—	NOT USED (CONNECT TO GND)
48	STANDBY/ RECEIVED	O	REMOTE CONTROL STANDBY/RECEIVED LED LIGHT
49	SURROUND	O	SURROUND ON/OFF SIGNAL OUTPUT
50~55	—	—	NOT USED (CONNECT TO GND)
56	TUNER MUTE	O	TUNER MUTING OUTPUT. "H" OUTPUT WHEN MUTE TURNS ON.
57	TUNER HOLD	O	HOLD SIGNAL OUTPUT.
58	TUNER RESET	O	TUNER RESET OUTPUT
59	POWER	O	POWER ON/OFF OUTPUT
60	X2	—	NON CONNECTION
61	X1	—	NOT USED(CONNECT TO GND)
62	VSS	—	CONNECT TO GND
63	OSC 2	—	CONNECT TO CERAMIC RESONATOR
64	OSC 1	—	CONNECT TO CERAMIC RESONATOR

■ LC6514B-4131 :IC421 (Tuner Control & FL Driver)

1. Terminal Layout


K IN 12 1
K IN 13 2
$\overline{\text{INT}}$ 3
DCS IN 2 4
NC 5
SI 6
CK 7
SD 8
STB 9
DCS OUT 2 10
$\overline{\text{TUNED}}$ 11
$\overline{\text{STEREO}}$ 12
NC 13
NC 14
S16 15
S17 16
S18 17
S19 18
$\overline{\text{RES}}$ 19
TEST 20
VSS 21
42 K IN 11
41 K IN 10
40 VDD
39 $\overline{\text{HOLD}}$
38 VP
37 MUTE
36 D8
35 D7
34 G1
33 G2
32 G3
31 G4
30 G5
29 G6
28 G7
27 S23
26 S22
25 S21
24 S20
23 OSC 2
22 OSC 1

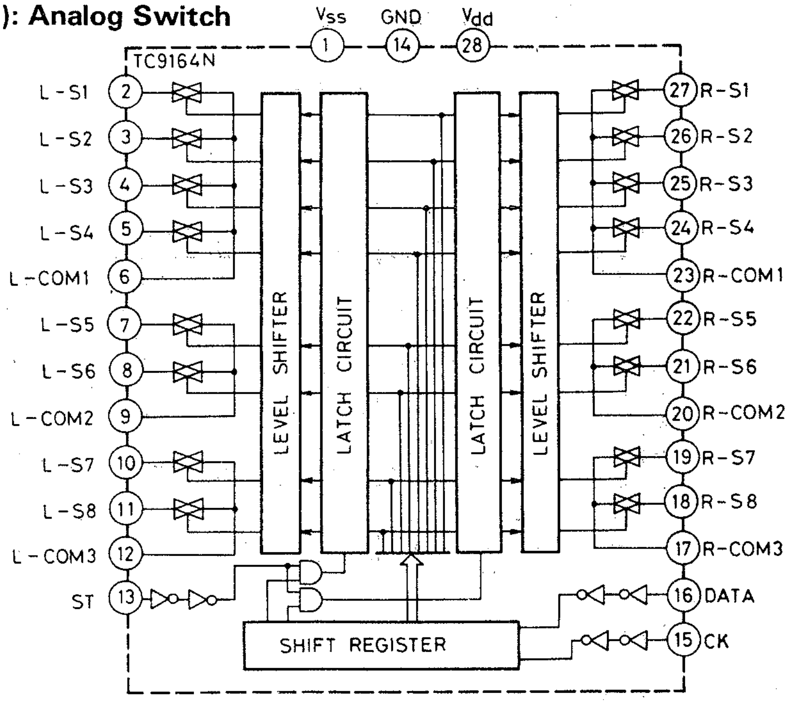
2.Table of Key Matrix

PIN NO. IN DIGIT	41 (K-IN10)	42 (K-IN11)	1 (K-IN12)	2 (K-IN13)
28(K-OUT10)		MEMORY	AUTO MEMORY	
29(K-OUT11)	FM	AM		MODE
30(K-OUT12)	TUNING UP	TUNING DOWN		
31(K-OUT13)	1	2	3	4
32(K-OUT14)	5	6	7	8
33(K-OUT15)	9	10	+ 10	PRESET SCAN

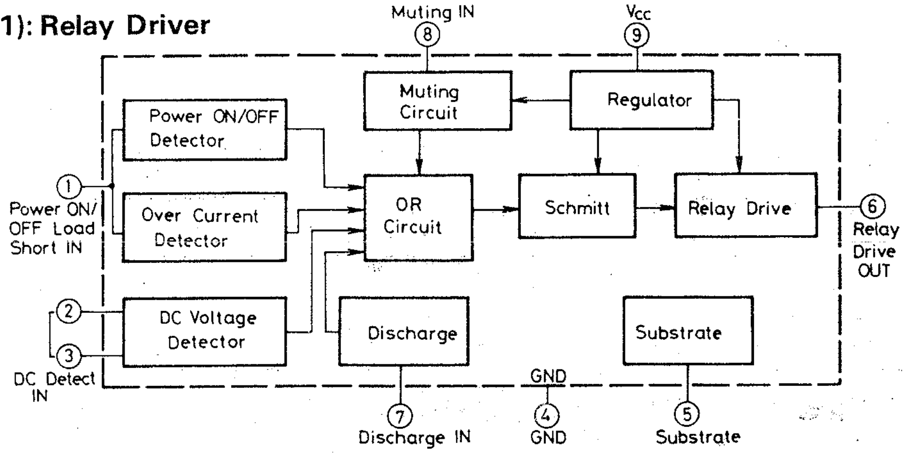
3. Pin Functions

Pin No.	Name	I/O	Functions and descriptions
1 ~ 2 , 41 ~ 42	KIN0 ~ KIN3	I	Key matrix input
3	$\overline{\text{INT}}$	I	Interrupt at "L" level.(connect to Vdd)
4	DCS-IN2	I	Input for DCS (COMPU LINK) system
5	NC	--	
6	SI	I	Serial Data Bus (Connect to LC 7218)
7	CK	O	Serial Data Bus (Connect to LC 7218)
8	SD	O	Serial Data Bus (Connect to LC 7218)
9	STB	O	Chip Enable Output (Connect to LC 7218)
10	DCS-OUT2	O	Output for DCS (COMPU LINK) System
11	$\overline{\text{TUNED}}$	I	Input for TUNED indicator
12	$\overline{\text{STEREO}}$	I	Input for STEREO indicator
13	NC	--	
14	NC	--	
15 ~ 18	S16 ~ S19	O	Segment output
19	$\overline{\text{RES}}$	I	Reset input
20	TEST	I	TEST mode input : GND.
21	VSS		GND.
22	OSC 1		Connect to Crystal oscillator
23	OSC 2		Connect to Crystal oscillator
24 ~ 27	S20 ~ S23	O	Segment output
28 ~ 33	G7~G2		Digit Output and Key matrix output
34	G1		DIGIT OUTPUT (GRID)
35,36	D7,D8		Keymatrix output
37	Tuner Mute	O	"H" outputs when mute turns on
38	VP		-32V
39	$\overline{\text{HOLD}}$	I	Hold Request input
40	VDD		+ 5V

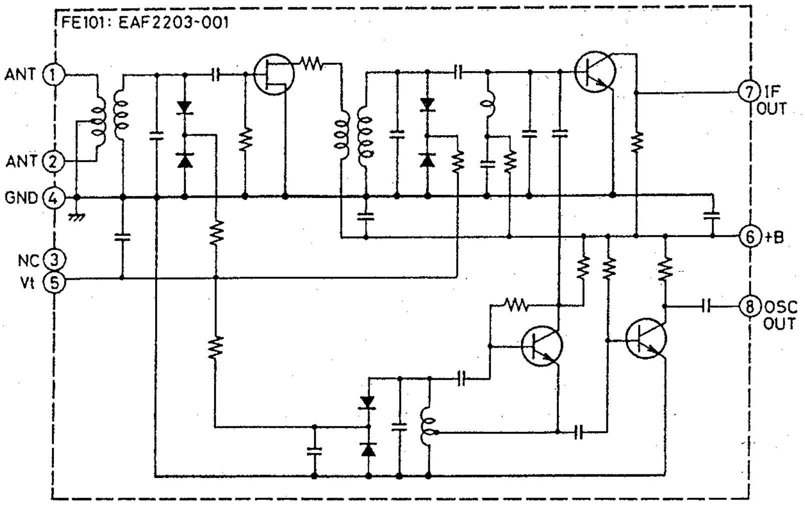
■ TC9164N(IC321): Analog Switch


Vss
GND
Vdd
1
14
28
TC9164N
L-S1 2
L-S2 3
L-S3 4
L-S4 5
L-COM1 6
L-S5 7
L-S6 8
L-COM2 9
L-S7 10
L-S8 11
L-COM3 12
ST 13
LEVEL SHIFTER
LATCH CIRCUIT
LATCH CIRCUIT
LEVEL SHIFTER
27 R-S1
26 R-S2
25 R-S3
24 R-S4
23 R-COM1
22 R-S5
21 R-S6
20 R-COM2
19 R-S7
18 R-S8
17 R-COM3
16 DATA
15 CK
SHIFT REGISTER

■ TA7317P(IC901): Relay Driver

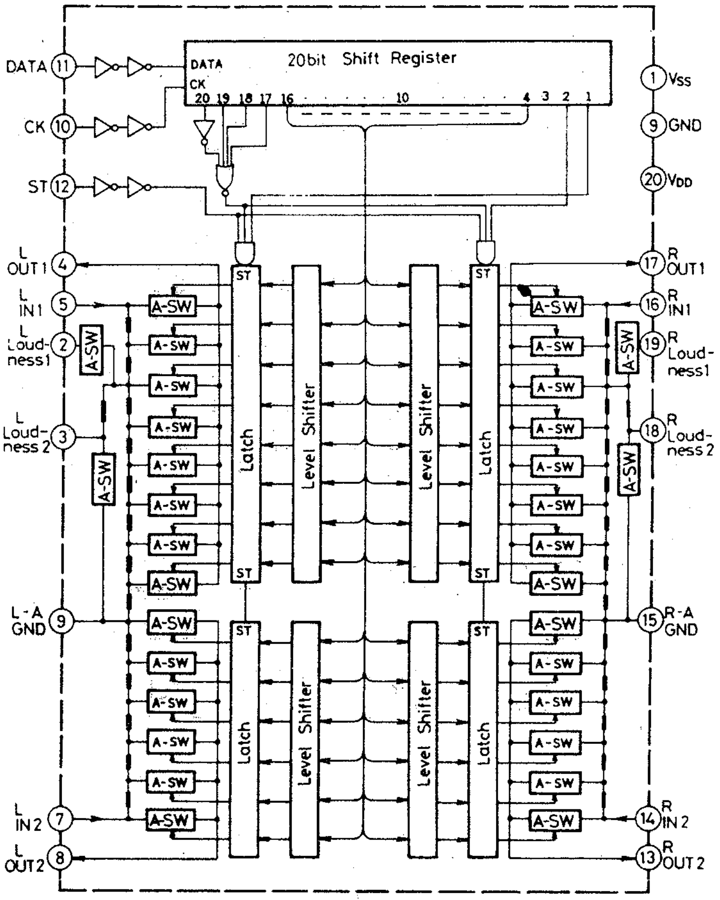

Muting IN
8
Vcc
9
Muting Circuit
Regulator
Power ON/OFF Detector
1
Power ON/ OFF Load Short IN
Over Current Detector
OR Circuit
Schmitt
Relay Drive
6
Relay Drive OUT
2
3
DC Voltage Detector
DC Detect IN
Discharge
Substrate
GND
7
Discharge IN
4
GND
5
Substrate

■ EAF2203-001(FE101): FM Front-end Pack


FE101: EAF2203-001
ANT 1
ANT 2
GND 4
NC 3
Vt 5
7 IF OUT
6 +B
8 OSC OUT

■ TC9177P (IC361) : Electronic Volume

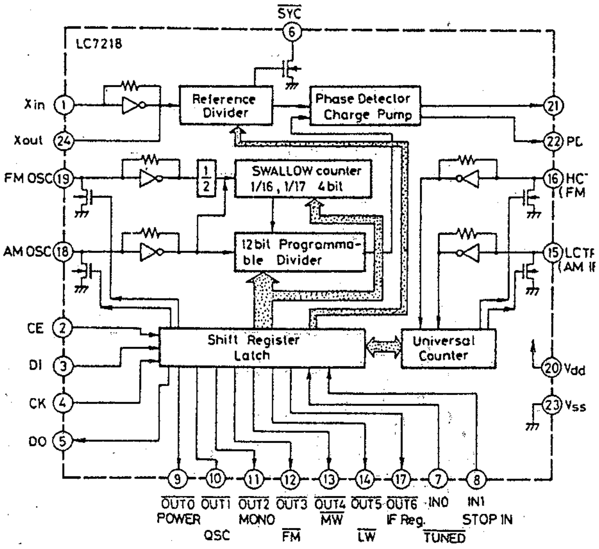
(1) Block Diagram


DATA ⑪
CK ⑩
ST ⑫
L OUT1 ④
L IN1 ⑤
L Loud-ness1 ②
L Loud-ness 2 ③
L-A GND ⑨
L IN2 ⑦
L OUT2 ⑧
① Vss
⑨ GND
⑳ VDD
⑰ R OUT1
⑯ R IN1
⑲ R Loud-ness1
⑱ R Loud-ness 2
⑮ R-A GND
⑭ R IN 2
⑬ R OUT 2
DATA
CK
20bit Shift Register
20 19 18 17 16 10 4 3 2 1
ST
Latch
Level Shifter
A-SW

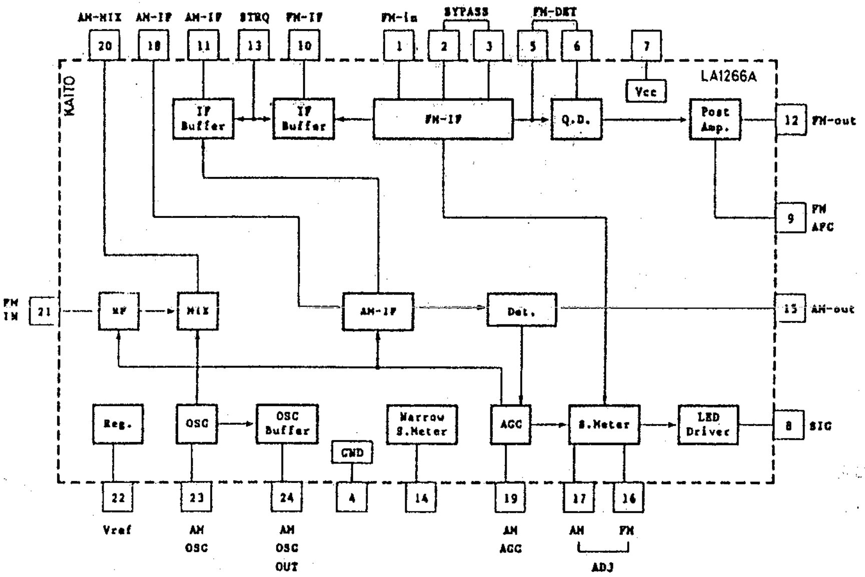
(2) Pin Functions

Pin No.	Symbol	Function
1	V ss	(-)Power Supply
2	L Loudness1	Terminal for Loudness (L-ch)
3	L Loudness2	Terminal for Loudness (L-ch)
4	L-OUT1	10dB Step Attenuator Output
5	L-IN 1	10dB Attenuator Input
6	A GND	Ground (Power Supply)
7	L-IN 2	2dB Attenuator Input
8	L-OUT2	2dB Step Attenuator Output
9	GND	Ground (Signal)
10	CK	Clock Input
11	DATA	Data Input
12	ST	Strobe Input
13	R-OUT2	2dB Step Attenuator Output
14	R-IN 2	2dB Attenuator Input
15	A-GND	Ground (Power Supply)
16	R IN 1	10dB Attenuator Input
17	R-OUT1	10dB Step Attenuator Output
18	R-Loudness2	Terminal for Loudness (R-ch)
19	R-Loudness1	Terminal for Loudness (R-ch)
20	V dd	(+)Power Supply

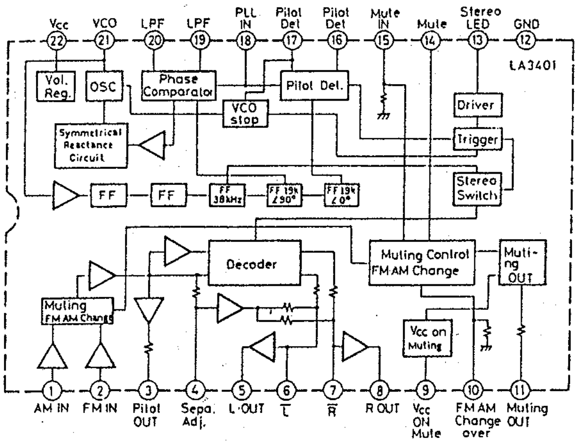
■ LC7218(IC102): PLL Synthesizer


$\overline{SYC}$
6
LC7218
Xin 1
Xout 24
FM OSC 19
AM OSC 18
CE 2
DI 3
CK 4
DO 5
Reference Divider
Phase Detector Charge Pump
SWALLOW counter 1/16, 1/17 4bit
1/2
12bit Programmable Divider
Shift Register Latch
Universal Counter
21
22 PD
16 HC (FM
15 LCTF (AM IF
20 Vdd
23 Vss
9 10 11 12 13 14 17 7 8
$\overline{OUT0}$ $\overline{OUT1}$ $\overline{OUT2}$ $\overline{OUT3}$ $\overline{OUT4}$ $\overline{OUT5}$ $\overline{OUT6}$ IN0 IN1
POWER MONO $\overline{MW}$ IF Reg. STOP IN
QSC $\overline{FM}$ $\overline{LW}$ $\overline{TUNED}$

■ LA1266A(IC104): FM/AM IF & DET.


AM-MIX 20
AM-IF 18
AM-IF 11
STRQ 13
FM-IF 10
FM-In 1
BYPASS 2 3
FM-DET 5 6
7
Vcc
LA1266A
KAITO
IF Buffer
IF Buffer
FM-IF
Q.D.
Post Amp.
12 FM-out
9 FM AFC
FM IN 21
RF
MIX
AM-IF
Det.
15 AM-out
Reg.
OSC
OSC Buffer
GND
Narrow S.Meter
AGC
S.Meter
LED Driver
8 SIG
22 Vref
23 AM OSC
24 AM OSC OUT
4
14
19 AM AGC
17 AM
16 FM
ADJ

■ LA3401(IC105): FM M.P.X.

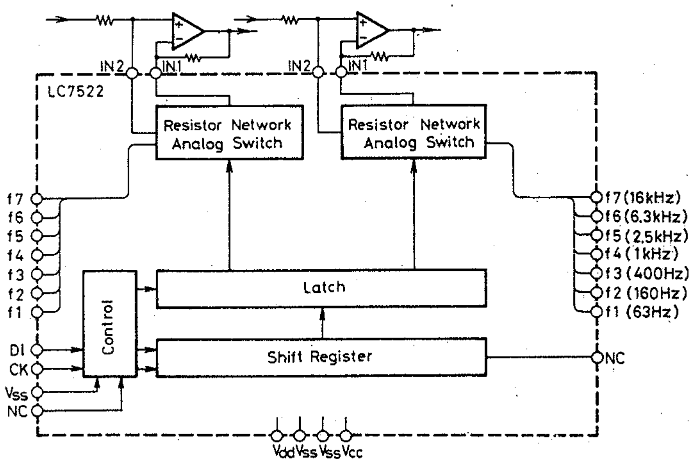

Vcc 22
VCO 21
LPF 20
LPF 19
PLL IN 18
Pilot Det 17
Pilot Det 16
Mute IN 15
Mute 14
Stereo LED 13
GND 12
LA3401
Vol. Reg.
OSC
Phase Comparator
VCO stop
Pilot Det.
Driver
Trigger
Symmetrical Reactance Circuit
FF
FF
FF 38kHz
FF 19k ∠90°
FF 19k ∠0°
Stereo Switch
Decoder
Muting Control FM·AM Change
Muting OUT
Muting FM AM Change
Vcc on Muting
1 AM IN
2 FM IN
3 Pilot OUT
4 Sepa. Adj.
5 L·OUT
6 $\overline{L}$
7 $\overline{R}$
8 R OUT
9 Vcc ON Mute
10 FM AM Change over
11 Muting OUT

■ LC7218(IC102): PLL Synthesizer

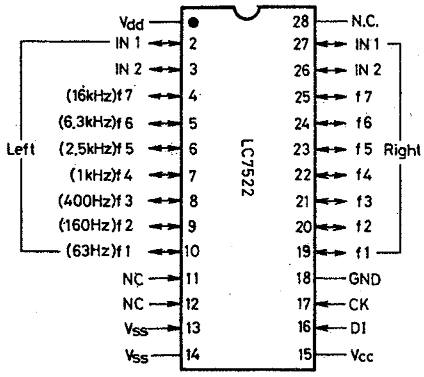
Symbol	Pin No.	Details	Function	I/O
Xin Xout	1 24	X'tal OSC	·Crystal oscillator (7.2 MHz)	I
FM OSC	19	Local oscillator signal input	·FM OSC is selected for serial data input: DV=1 is assigned. ·Input frequency is 10 ~ 130 MHz (125 mVrms min.).	I
AM OSC	18	Local oscillator signal input	·AM OSC is selected for serial data input: DV=0 is assigned. ·When serial data is input: SP=1 is assigned: ·Input frequency is 2 ~ 40 MHz (125 mVrms min.). ·When serial data is input: SP=0 is assigned: ·Input frequency is 0.5 ~ 10 MHz (125 mVrms min.).	I
PD1 PD2	21 22	Charge pump output	·PLL charge pump output. When the local oscillator signal frequency divided by N results in a frequency higher than the reference frequency, high level signals are output from PD1 and PD2.	0
$\overline{\text{SYC}}$	6	Controller clock	·This is the controller clock output pin and a 400 kHz signal (duty 66 %) is output after the power is turned ON.	0
V dd	20	Power supply	·Power supply pin for LC7218. It supplies 4.5 ~ 6.5 V when the PLL circuit is activated.	-
V ss	23	Ground	·GND pin of LC7218.	-
CE	2	Chip enable	·This pin goes high when serial data is input (DI) to LC7218 or output from it.	I
CK	4	Clock	·This clock is used to synchronize data when serial data is input (DI) to or output (DO) from LC7218.	I
DI	3	Input data	·Input pin for serial data which is transmitted from the controller to LC7218. ·A total of 36 bits of data should be input for initialization.	I
DO	5	Output data	·Output pin for serial data transmitted from LC7218 to the controller. ·A total of 24 bits can be output from the internal shift register in synchronized with CK.	0
$\overline{\text{OUT 0}}$ $\overline{\text{OUT 1}}$ $\overline{\text{OUT 2}}$ $\overline{\text{OUT 3}}$ $\overline{\text{OUT 4}}$ $\overline{\text{OUT 5}}$ $\overline{\text{OUT 6}}$	9 10 11 12 13 14 17	POWER QSC MONO FM MW LW IF Reg.	·Latches $\overline{\text{OUT 0}}$ ~ $\overline{\text{OUT 6}}$ of the serial data transmitted from the controller, and inverts the data to output it in parallel. ·$\overline{\text{OUT 0}}$ can outputs the time base for clock (8 Hz). (When TB = 1.) ·$\overline{\text{OUT 1}}$ and $\overline{\text{OUT 2}}$ are complementary outputs. ·$\overline{\text{OUT 0}}$, $\overline{\text{OUT 3}}$, $\overline{\text{OUT 4}}$, $\overline{\text{OUT 5}}$ and $\overline{\text{OUT 6}}$ are N-ch open drain outputs (up to 13 V).	0
IN 0 IN 1	7 8	TUNED STOP IN	·The data at input ports IN 0, IN 1 is converted from parallel to serial, and can be output from output pin DO.	I
HCTR (FM IF)	16	General purpose measurement signal input pin	·With serial data input: SC = 1, HCTR is selected. ·The signal is transmitted to the general-purpose counter (20-bit binary counter) via a 1/8 divider internally.	I
LCTR (AM IF)	15	General purpose counter frequency input pin	·With serial data input: SC = 0, LCTR is selected. ·At this time, if serial data is input: SF = 1 ; ·The signal is transmitted directly to the general-purpose counter without passing through the internal 1/8 divider. ·If serial data is input SF = 0 ; ·Input frequency is 1 Hz ~ 20kHz (V IH = 0.7 VDD min., V IL = 0.3 VDD max.)	I

■ LC7522(IC504):SEA Controller

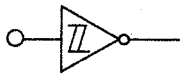
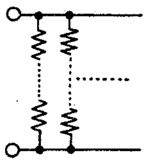
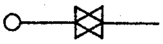
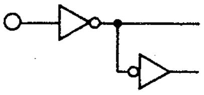
1. Block Diagram


IN2
IN1
IN2
IN1
LC7522
Resistor Network Analog Switch
Resistor Network Analog Switch
f7
f6
f5
f4
f3
f2
f1
Control
Latch
Shift Register
DI
CK
Vss
NC
f7 (16kHz)
f6 (6.3kHz)
f5 (2.5kHz)
f4 (1kHz)
f3 (400Hz)
f2 (160Hz)
f1 (63Hz)
NC
Vdd Vss Vss Vcc

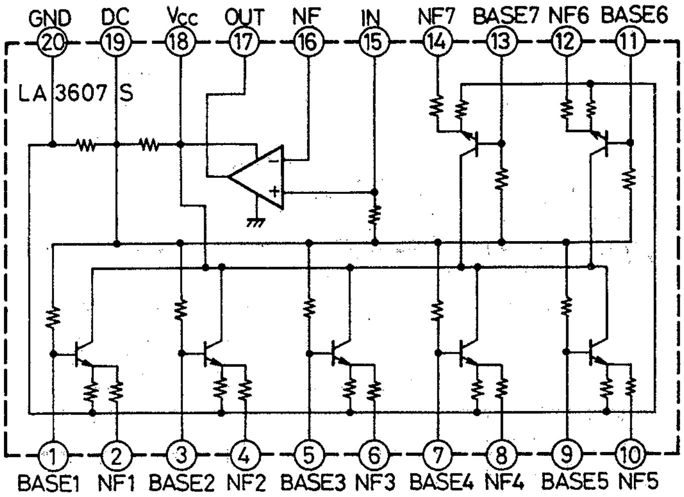
2. Terminal Layout


LC7522
Vdd 1
IN 1 2
IN 2 3
(16kHz)f7 4
(6.3kHz)f6 5
(2.5kHz)f5 6
(1kHz)f4 7
(400Hz)f3 8
(160Hz)f2 9
(63Hz)f1 10
NC 11
NC 12
Vss 13
Vss 14
Left
28 N.C.
27 IN 1
26 IN 2
25 f7
24 f6
23 f5
22 f4
21 f3
20 f2
19 f1
18 GND
17 CK
16 DI
15 Vcc
Right

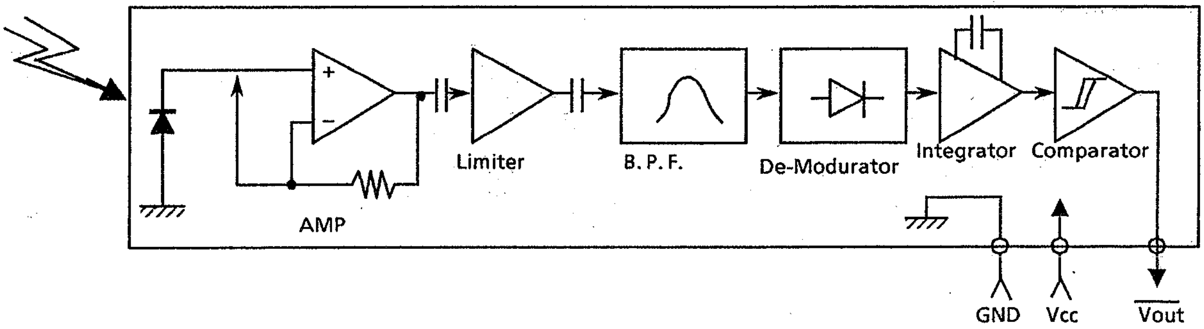
3. Terminal Functions

Name	Number	Terminal type	Explanation
V DD V ref V SS V EE	1 15 18 14	-----	+7V power supply for audio signal +5V power supply for operating the microcomputer 0V -7V power supply for audio signal
DI	16		For data input from CPU (Schmitt inverter type)
CLK	17		For clock input from CPU(Schmitt inverter type)
GND	---	-----	Audio signal line GND
IN1	2,27		For audio signal input IN1 connected to the inversion input of the operation amplifier
IN2	3,26		IN2 connected to the non-inversion input of the operation amplifier Provided for both left and right channels.
f1~f7	10~4,19~25		For connection to the band pass filter f1~f7 for left and right channels (total 14)
S	13		Select terminal when using 2 chips 7C3 is connected to Vdd with key code "1" input 7C2 is connected to Vee with key code "0" input

- **LA3607S (IC501, IC502): 7-segments SEA Equalizer.**

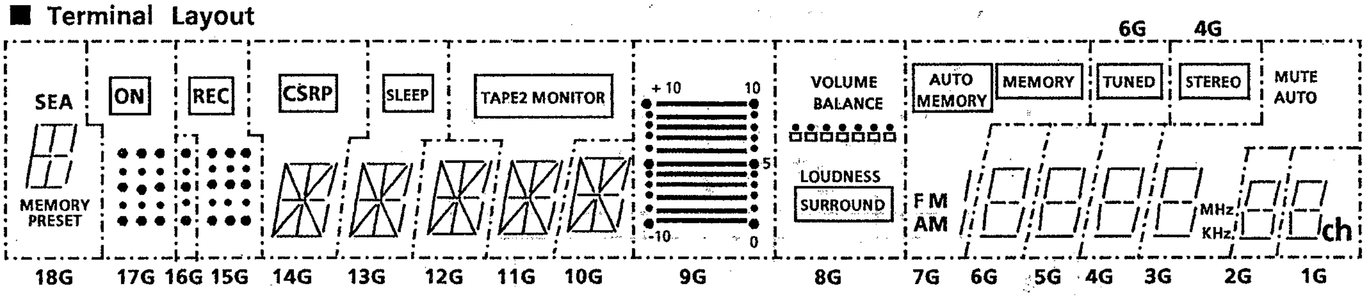

GND
DC
Vcc
OUT
NF
IN
NF7
BASE7
NF6
BASE6
⑳
⑲
⑱
⑰
⑯
⑮
⑭
⑬
⑫
⑪
LA 3607 S
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
BASE1
NF1
BASE2
NF2
BASE3
NF3
BASE4
NF4
BASE5
NF5

GP1U501X (IC402) : Remocon Module IC


AMP
Limiter
B. P. F.
De-Modurator
Integrator
Comparator
GND
Vcc
Vout

Internal Wiring of FL Display (FL401:ELU0001-097)

■ Terminal Layout

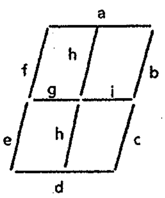

6G
4G
SEA
ON
REC
CSRP
SLEEP
TAPE2 MONITOR
+10
10
51
-10
0
VOLUME
BALANCE
LOUDNESS
SURROUND
AUTO
MEMORY
MEMORY
TUNED
STEREO
MUTE
AUTO
MEMORY
PRESET
FM
AM
MHz
KHz
ch
18G
17G
16G
15G
14G
13G
12G
11G
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G

■ Terminal Connection

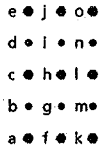
Notes : F (Filament) , G (Grid) , P (Anode) , NP (No Pin)

Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
IC401 Pin No.	-	-	-	-	4	17	30	5	19	27	26	6	28	16	7	25	21	8	20	24	9	22	23
Electrode	F	F	NP	NC	16G 18G	P (S4)	P (S16)	17G	P (S5)	P (S13)	P (S12)	15G	P (S14)	P (S3)	14G	P (S11)	P (S7)	13G	P (S6)	P (S10)	12G	P (S6)	P (S9)
Terminal No.	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**
IC401 Pin No.	15	14	29	-	10	11	-	-	-	-	12	13	-	-	-	-	-	-	-	-	-	-	-
Electrode	P (S2)	P (S1)	P (S15)	NP	11G	10G	NC	NC	NC	NC	9G	8G	IC	IC	NP	NP	NP	NP	NP	NP	NP	NP	NP
Terminal No.	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**-**
IC421 Pin No.	-	-	-	-	28	29	30	31	16	17	26	32	27	22	23	18	24	34	15	-	-	-	-
Electrode	NP	NP	NP	NP	7G	6G	5G	4G	P S(18)	P S(19)	P S(23)	3G	P (S24)	P (S22)	2G	P (S20)	P (S21)	1G	P (S17)	NP	F	F	-

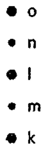
■ Internal Connection


a
b
c
d
e
f
g
h
i
h

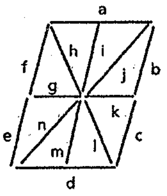
(18G)


e
j
o
d
i
n
c
h
l
b
g
m
a
f
k

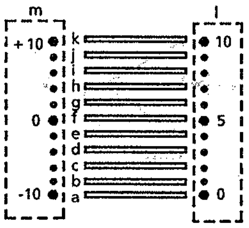
15,17G



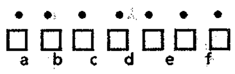
16G


a
b
c
d
e
f
g
h
i
j
k
l
m
n

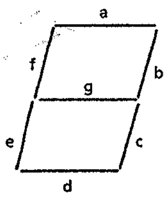
(10G~14G)


m
l
+10
10
k
j
i
h
g
0
5
f
e
d
c
b
-10
a
0

9G



8G



(1G~6G)

SOURCE SECTION

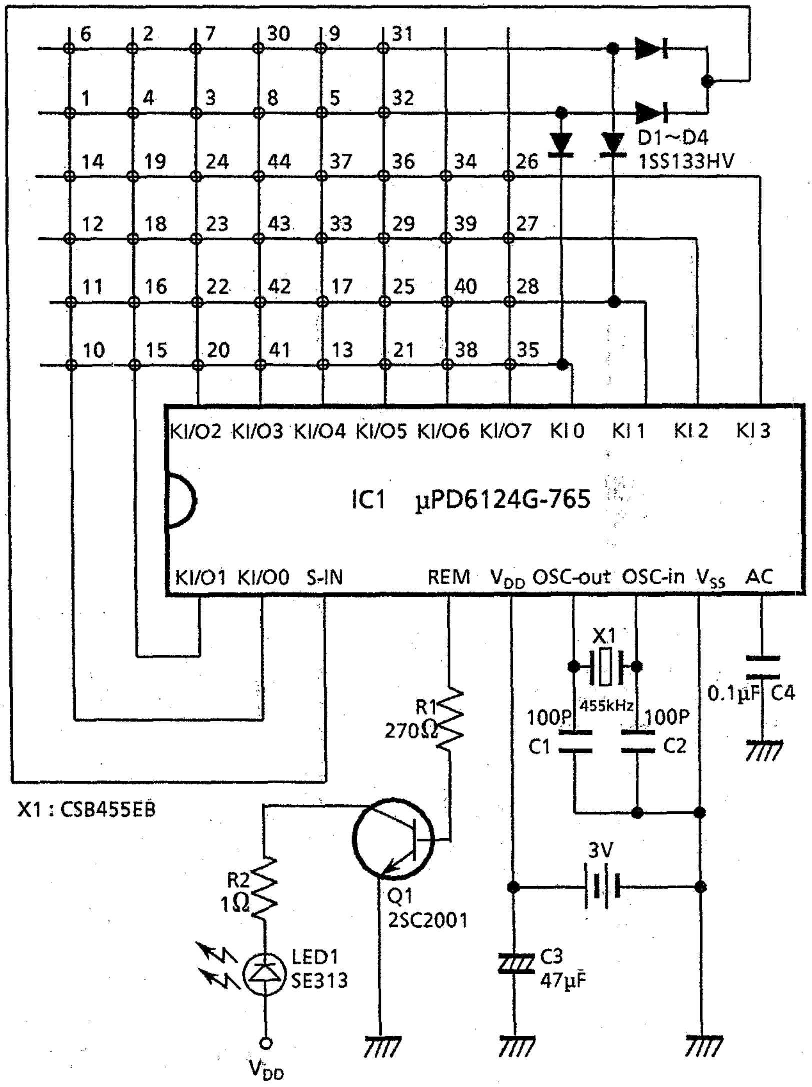
	18G	17G	16G	15G	14G	13G	12G	11G	10G	9G	8G
S1	a	j	-	j	a	a	a	a	a	-	BALANCE
S2	b	o	-	o	b	b	b	b	b	-	●●●●●●●
S3	-	b	l	b	c	c	c	c	c	f	LOUDNESS
S4	SEA PRESET	k	-	k	d	d	d	d	d	a	SURROUND
S5	d	f	-	f	e	e	e	e	e	b	a
S6	-	c	m	c	f	f	f	f	f	i	d
S7	g	h	-	h	g	g	g	g	g	h	c
S9	h	i	-	i	h	h	h	h	h	k	f
S9	-	d	n	d	i	i	i	i	i	l	g
S10	f	n	-	n	j	j	j	j	j	j	e
S11	i	m	-	m	k	k	k	k	k	g	b
S12	e	l	-	l	l	l	l	l	l	d	-
S13	-	a	k	a	m	m	m	m	m	c	-
S14	c	g	-	g	n	n	n	n	n	e	-
S15	-	e	o	e	CSRP	SLEEP	-	TAPE2 MONITOR	-	-	VOLUME
S16	MEMORY	ON	-	REC	-	-	●	-	-	m	-

TUNER SECTION

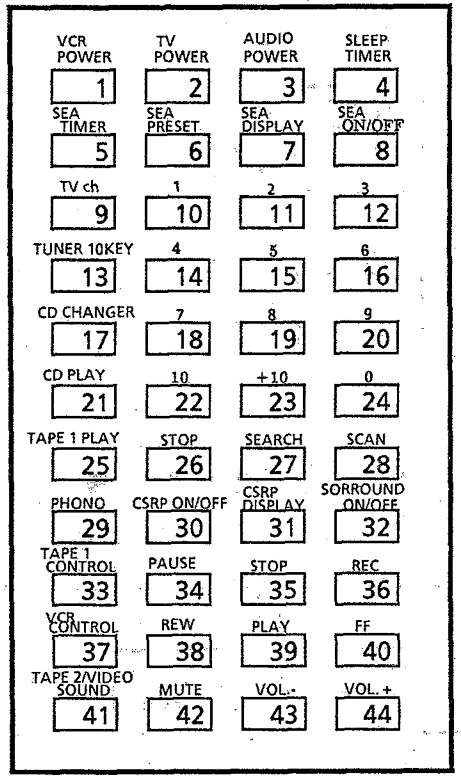
	7G	6G	5G	4G	3G	2G	1G
S17	-	TUNED	●	STEREO	MUTE AUTO	-	ch
S18	AUTO MEMORY	a	a	a	-	a	a
S19	-	b	b	b	MHz	c	c
S20	MEMORY	c	c	c	KHz	c	c
S21	-	d	d	d	g	d	d
S22	FM	e	e	e	c,f	e	e
S23	AM	f	f	f	b,e	f	f
S24	/	g	g	g	a,d	g	g

Remote Control Unit (RM-SR503U)

■Schematic Diagram


6
2
7
30
9
31
1
4
3
8
5
32
14
19
24
44
37
36
34
26
12
18
23
43
33
29
39
27
11
16
22
42
17
25
40
28
10
15
20
41
13
21
38
35
D1~D4
1SS133HV
KI/O2
KI/O3
KI/O4
KI/O5
KI/O6
KI/O7
KI 0
KI 1
KI 2
KI 3
IC1 µPD6124G-765
KI/O1
KI/O0
S-IN
REM
V_{DD}
OSC-out
OSC-in
V_{SS}
AC
X1
455kHz
100P
C1
100P
C2
0.1µF
C4
R1
270Ω
Q1
2SC2001
R2
1Ω
LED1
SE313
V_{DD}
3V
C3
47µF
X1 : CSB455EB

■ Key Layout

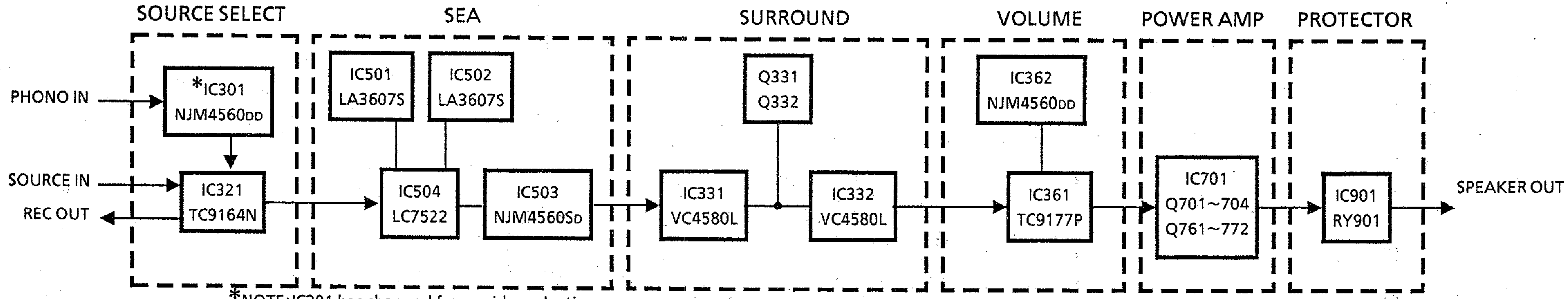

VCR POWER
1
TV POWER
2
AUDIO POWER
3
SLEEP TIMER
4
SEA TIMER
5
SEA PRESET
6
SEA DISPLAY
7
SEA ON/OFF
8
TV ch
9
1
10
2
11
3
12
TUNER 10KEY
13
4
14
5
15
6
16
CD CHANGER
17
7
18
8
19
9
20
CD PLAY
21
10
22
+10
23
0
24
TAPE 1 PLAY
25
STOP
26
SEARCH
27
SCAN
28
PHONO
29
CSRP ON/OFF
30
CSRP DISPLAY
31
SORROUND ON/OFF
32
TAPE 1 CONTROL
33
PAUSE
34
STOP
35
REC
36
VCR CONTROL
37
REW
38
PLAY
39
FF
40
TAPE 2/VIDEO SOUND
41
MUTE
42
VOL.-
43
VOL.+
44

■ PARTS LIST

SYMBOL	DESCRIPTION
R1	270Ω
R2	1Ω
C1	100pF
C2	100pF
C3	47µF
C4	0.1µF
D1	1SS133HV
D2	1SS133HV
D3	1SS133HV
D4	1SS133HV
LED1	SE313
X1	455kHz
IC1	µPD6124G-765
Q1	2SC2001

Block Diagram

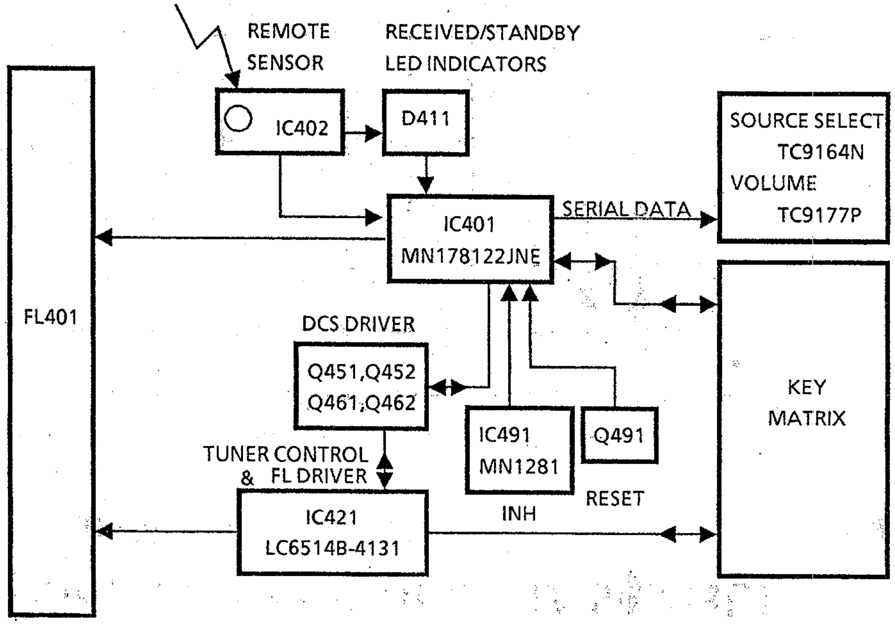
■ Signal Flow


SOURCE SELECT
SEA
SURROUND
VOLUME
POWER AMP
PROTECTOR
PHONO IN
SOURCE IN
REC OUT
*IC301 NJM4560DD
IC321 TC9164N
IC501 LA3607S
IC502 LA3607S
IC504 LC7522
IC503 NJM4560SD
IC331 VC4580L
Q331 Q332
IC332 VC4580L
IC362 NJM4560DD
IC361 TC9177P
IC701 Q701~704 Q761~772
IC901 RY901
SPEAKER OUT

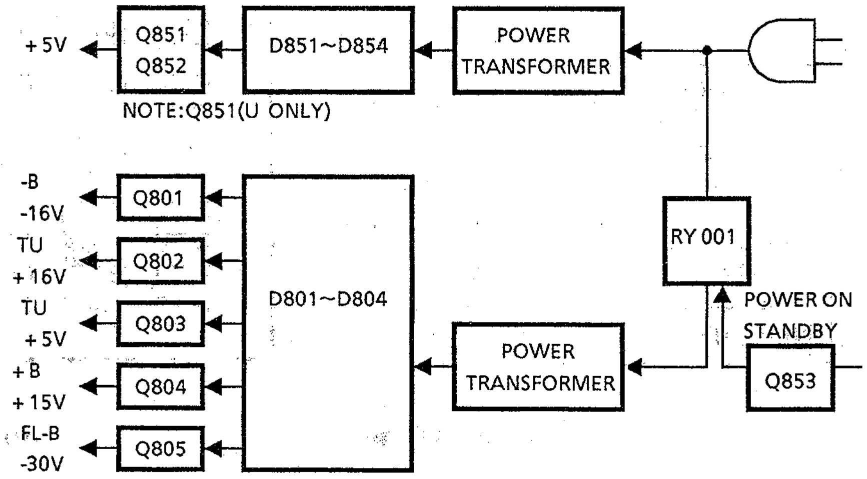
*NOTE:IC301 has changed from mid-production.

J #5001~ :VC4580DD
Others #1~ :VC4580DD

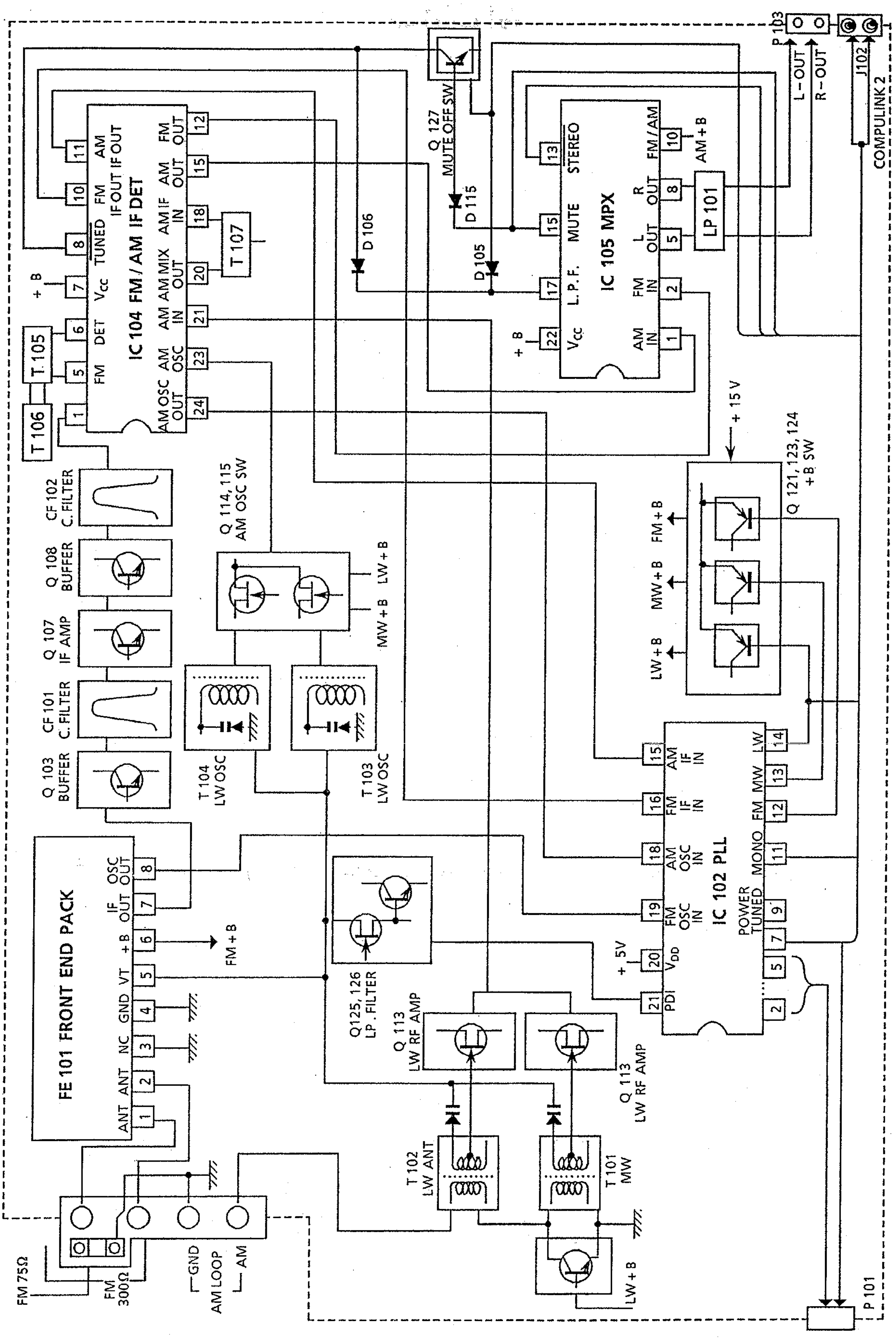
■ Control Section


REMOTE SENSOR
RECEIVED/STANDBY LED INDICATORS
IC402
D411
IC401 MN178122JNE
SERIAL DATA
SOURCE SELECT TC9164N
VOLUME TC9177P
FL401
DCS DRIVER
Q451,Q452 Q461,Q462
TUNER CONTROL & FL DRIVER
IC421 LC6514B-4131
IC491 MN1281
INH
Q491
RESET
KEY MATRIX

■ Power Supply Section


+5V
Q851 Q852
D851~D854
POWER TRANSFORMER
NOTE:Q851(U ONLY)
-B
-16V
TU
+16V
TU
+5V
+B
+15V
FL-B
-30V
Q801
Q802
Q803
Q804
Q805
D801~D804
POWER TRANSFORMER
RY 001
POWER ON STANDBY
Q853

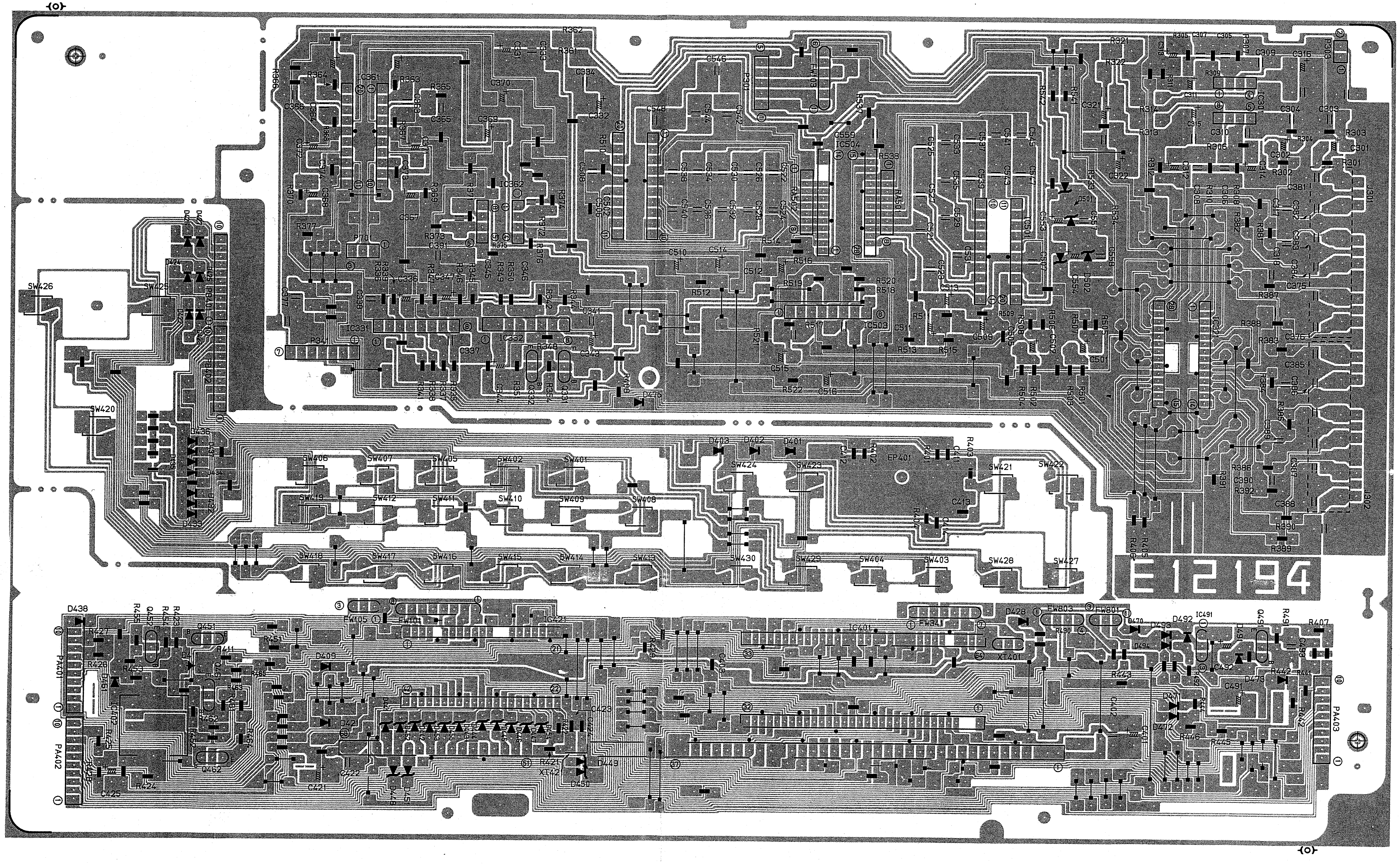
■ Tuner Section


IC 104 FM / AM IF DET
AM OSC OUT
FM
DET
Vcc
TUNED
FM IF OUT
AM IF OUT
FM OUT
AM OUT
AM IF IN
AM MIX OUT
AM IN
AM OSC
+ B
T 105
T 106
T 107
CF 102 C. FILTER
Q 108 BUFFER
Q 107 IF AMP
CF 101 C. FILTER
Q 103 BUFFER
Q 114, 115 AM OSC SW
MW + B
LW + B
T 104 LW OSC
T 103 LW OSC
FE 101 FRONT END PACK
ANT
NC
GND
VT
+ B
IF OUT
OSC OUT
FM + B
Q125, 126 LP. FILTER
Q 113 LW RF AMP
T 102 LW ANT
T 101 MW
FM 75Ω
FM 300Ω
GND
AM LOOP
AM
D 106
D 105
D 115
Q 127 MUTE OFF SW
IC 105 MPX
STEREO
MUTE
L. P. F.
Vcc
AM IN
FM IN
L OUT
R OUT
FM/AM
AM + B
LP 101
P 103
L − OUT
R − OUT
J102
COMPULINK 2
+ 15 V
Q 121, 123, 124 + B SW
FM + B
MW + B
LW + B
IC 102 PLL
AM IF IN
FM IF IN
AM OSC IN
FM OSC IN
VDD
+ 5V
PDI
LW
MW
FM
MONO
POWER
TUNED
P 101
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

MEMO

RX-503BK
RX-503LBK

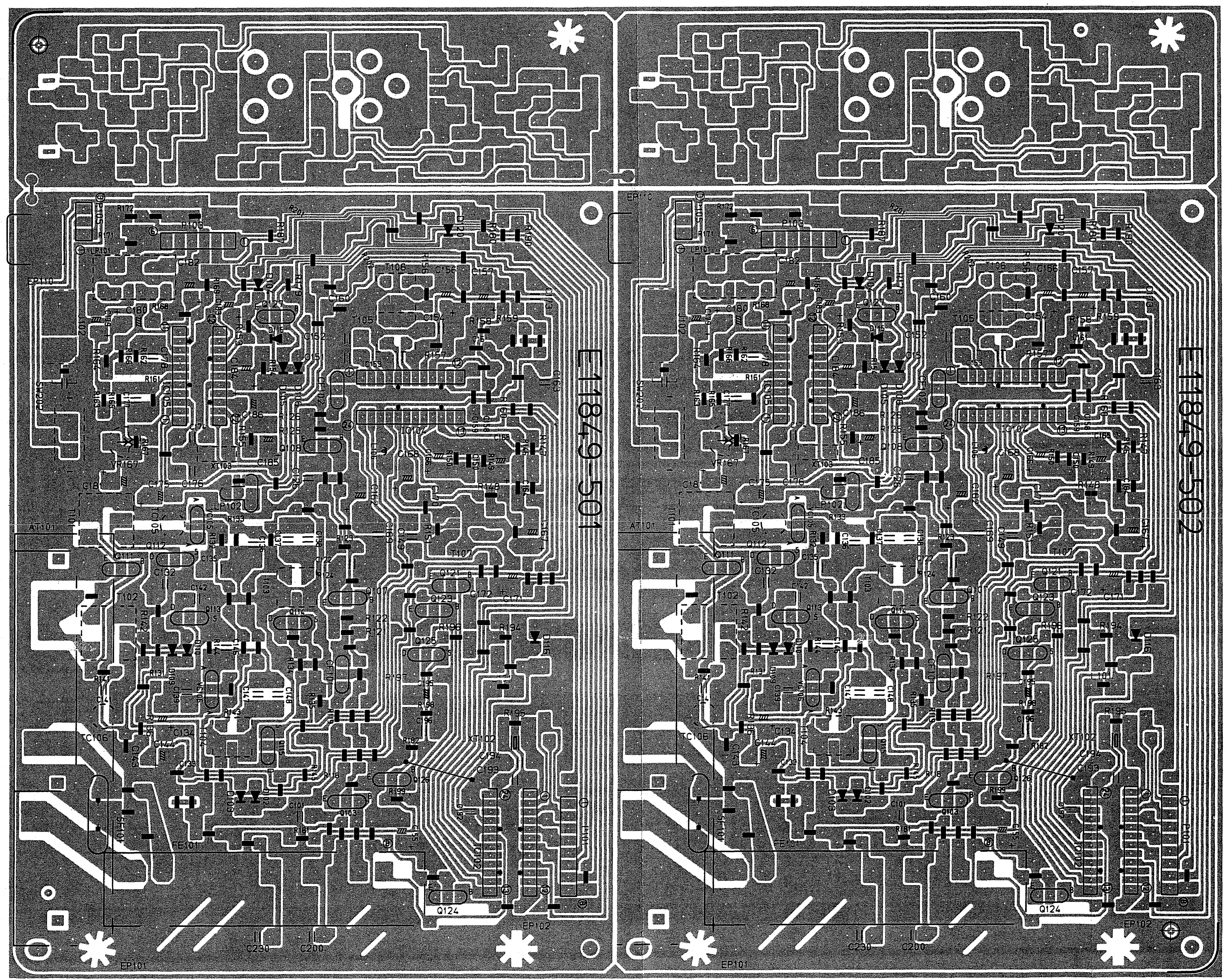
(2) Source Selector & SEA PC Board


E12194
SW426
SW425
SW420
SW406
SW407
SW405
SW402
SW401
SW424
SW423
SW421
SW422
SW419
SW412
SW411
SW410
SW409
SW408
SW418
SW417
SW416
SW415
SW414
SW413
SW430
SW429
SW404
SW403
SW428
SW427
EP401
D403
D402
D401
IC361
IC362
IC331
IC504
IC401
IC491
P701
P341
PA401
PA402
PA403
XT401
XT421
D438
D428
D449
D450
D492
D479
Q451
Q452
C425
C421
C422
C423
C491
C492
R407
R421
R424
R445
R446
R512
R513
R515
R516
R518
R519
R520
R522
R362
R361
R321
R322
R303
R301
R302
R387
R388
R389
R390
R392
C301
C304
C305
C309
C316
C375
C385
C386
C388
C390
C510
C512
C514
C546
C548
C550
C515
C503
C511

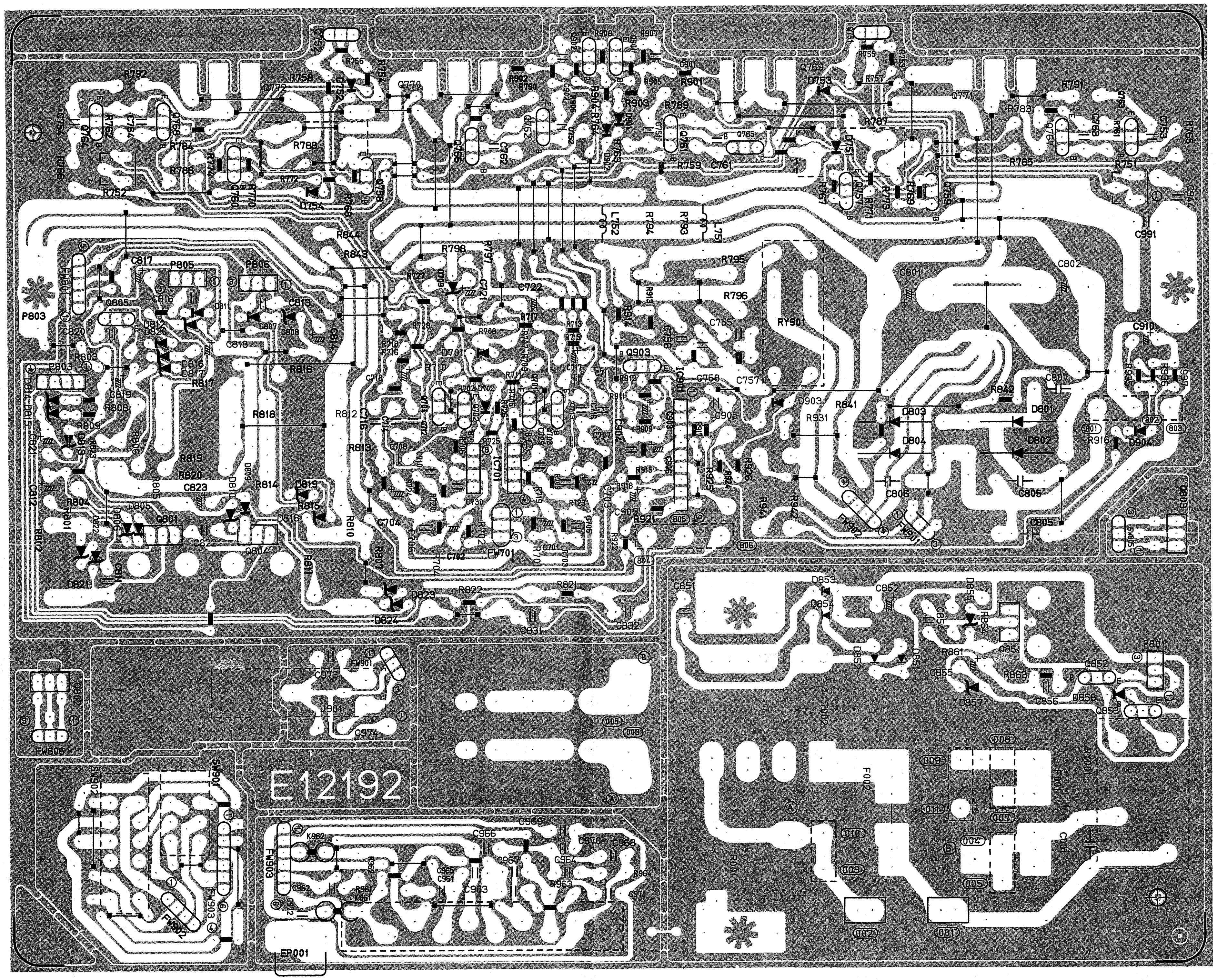
(No.20160)

Printed Circuit Boards

(1) Tuner Section PC Board

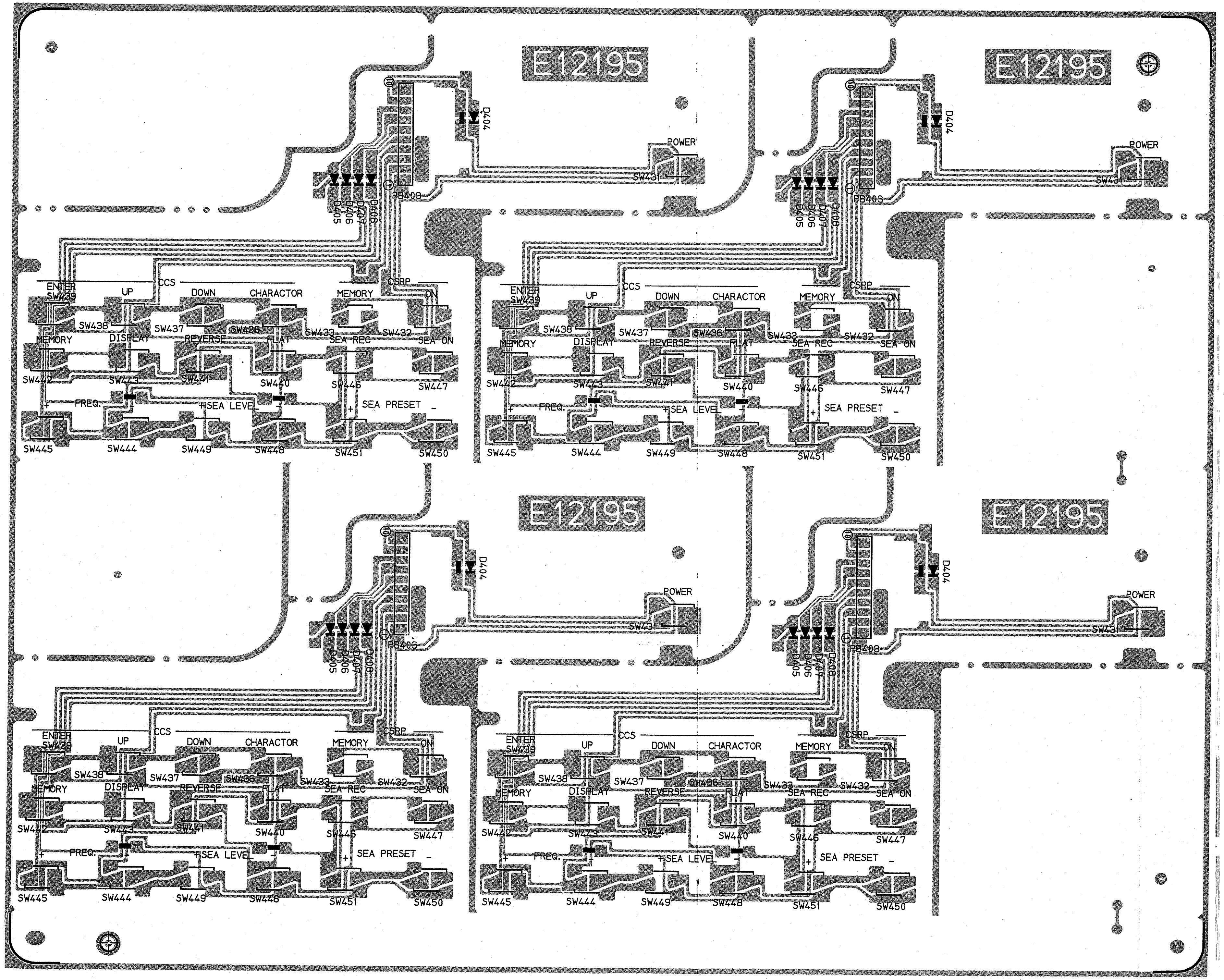

E11849-501
E11849-502
Q124
Q124
EP101
EP101
EP102
EP102
C230
C200
C230
C200

(4) Power Amplifier PC Board


E12192
R792
R758
Q770
Q772
R756
R757
R908
R907
R902
R790
R905
R901
R903
R789
Q769
D753
R755
R757
Q771
R791
R783
R765
R751
R785
R759
C761
Q765
Q761
D752
D754
R788
R786
R784
R752
R766
C754
Q764
R762
C764
Q768
R774
Q760
R770
R772
R768
R787
R767
R773
R769
Q759
Q757
L752
R794
R793
L751
R844
R843
R798
R797
R795
R796
RY901
C801
C802
C991
C941
C817
P805
P806
P803
Q805
C816
C813
D811
D807
D808
C814
C818
C820
R803
R808
R809
R816
R817
R818
R812
R813
R819
R820
R814
C823
D819
R815
D818
Q801
Q804
C822
R810
R811
R804
R802
D821
C811
D823
D824
R822
R821
C831
C832
R727
R728
C721
C722
R717
R709
R716
D701
R710
IC701
IC702
C704
C706
C702
R702
R704
FW701
R701
C703
R719
R725
R723
Q903
C755
C756
C758
C757
D903
R931
R841
D803
D804
R842
C807
D801
D802
R916
D904
C910
C806
C805
C808
R915
R918
C909
R921
R922
C905
R925
R926
R924
R941
R942
FW902
FW901
Q803
C851
D853
C852
D855
D854
R862
D852
D851
R861
C855
R863
D857
C856
D858
Q852
Q853
P801
T002
F002
F001
RY001
C001
R001
L901
FW901
C973
C974
FW805
SW902
SW901
FW903
C966
C969
C970
C968
C967
C964
C965
C961
C963
R963
R964
C971
C962
R962
K962
R961
K961
C972
EP001

Printed Circuit Boards

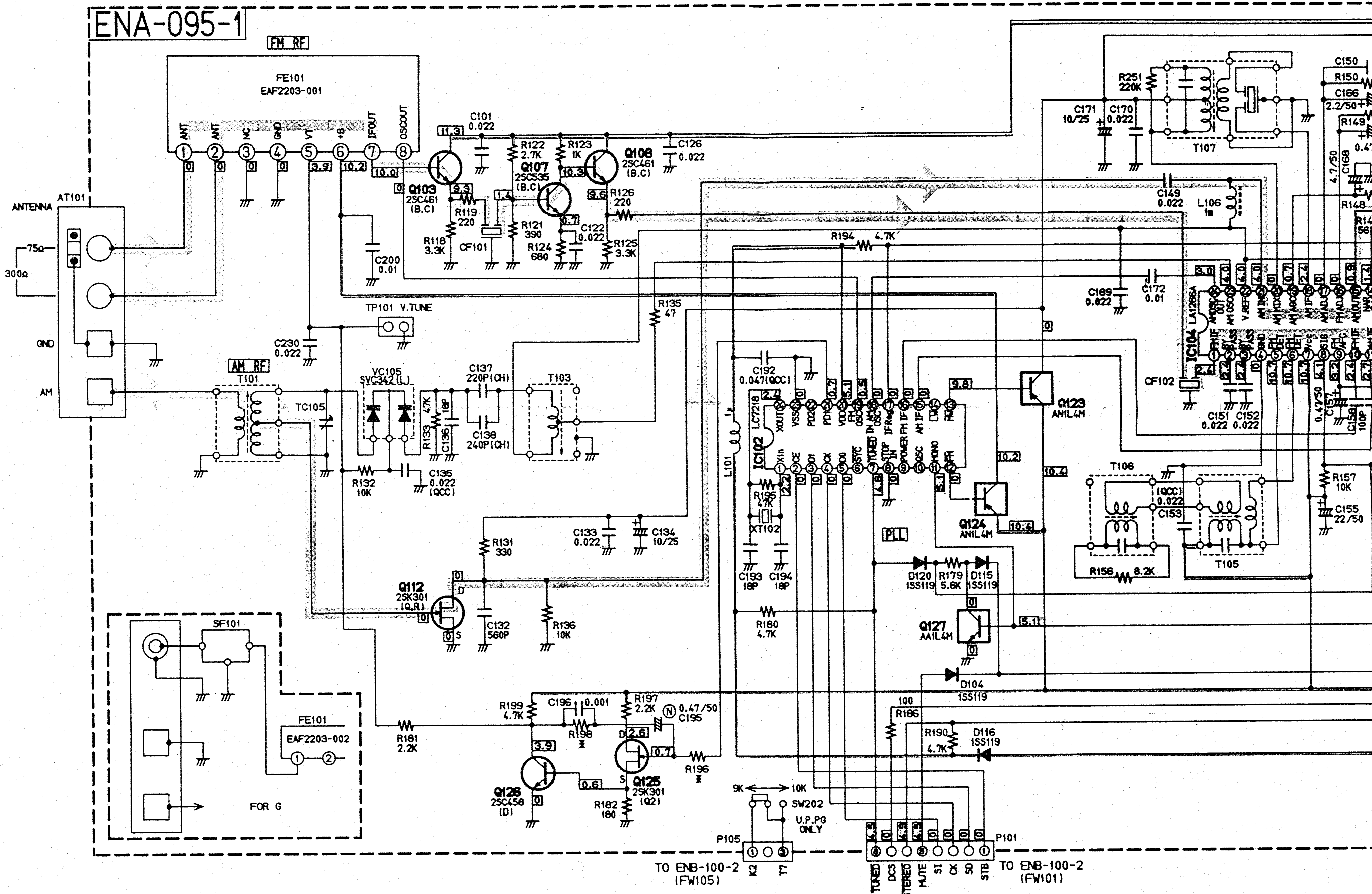
(3) Front Switch PC Board


E12195
D404
POWER
SW431
PB403
D408
D407
D406
D405
ENTER
SW439
UP
CCS
DOWN
CHARACTOR
MEMORY
CSRP
ON
SW438
SW437
SW436
SW433
SW432
MEMORY
DISPLAY
REVERSE
FLAT
SEA REC
SEA ON
SW442
SW443
SW441
SW440
SW446
SW447
FREQ.
SEA LEVEL
SEA PRESET
SW445
SW444
SW449
SW448
SW451
SW450
E12195
D404
POWER
SW431
PB403
D408
D407
D406
D405
ENTER
SW439
UP
CCS
DOWN
CHARACTOR
MEMORY
CSRP
ON
SW438
SW437
SW436
SW433
SW432
MEMORY
DISPLAY
REVERSE
FLAT
SEA REC
SEA ON
SW442
SW443
SW441
SW440
SW446
SW447
FREQ.
SEA LEVEL
SEA PRESET
SW445
SW444
SW449
SW448
SW451
SW450
E12195
D404
POWER
SW431
PB403
D408
D407
D406
D405
ENTER
SW439
UP
CCS
DOWN
CHARACTOR
MEMORY
CSRP
ON
SW438
SW437
SW436
SW433
SW432
MEMORY
DISPLAY
REVERSE
FLAT
SEA REC
SEA ON
SW442
SW443
SW441
SW440
SW446
SW447
FREQ.
SEA LEVEL
SEA PRESET
SW445
SW444
SW449
SW448
SW451
SW450
E12195
D404
POWER
SW431
PB403
D408
D407
D406
D405
ENTER
SW439
UP
CCS
DOWN
CHARACTOR
MEMORY
CSRP
ON
SW438
SW437
SW436
SW433
SW432
MEMORY
DISPLAY
REVERSE
FLAT
SEA REC
SEA ON
SW442
SW443
SW441
SW440
SW446
SW447
FREQ.
SEA LEVEL
SEA PRESET
SW445
SW444
SW449
SW448
SW451
SW450

SCHEMATIC DIAGRAM

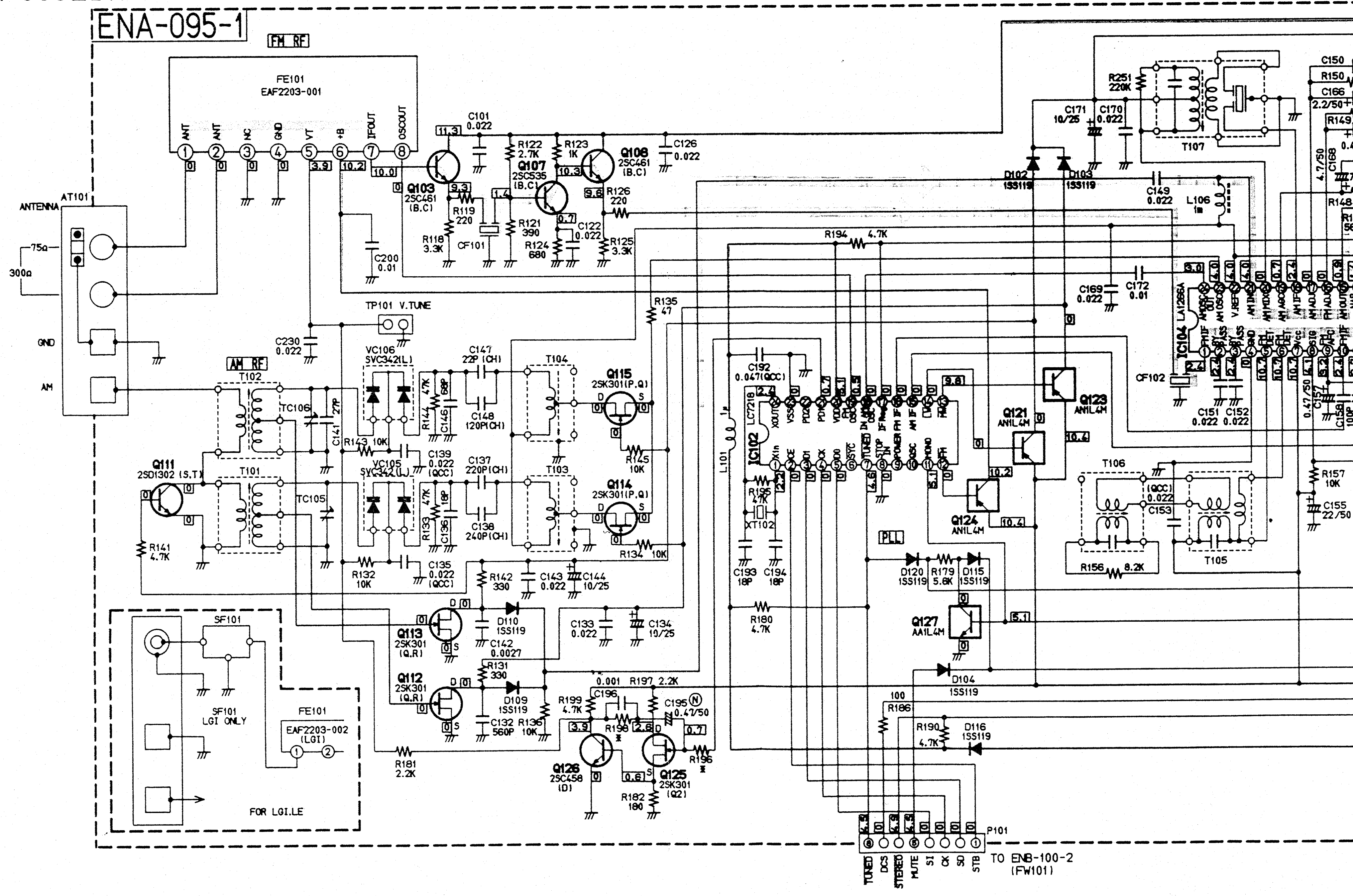
(1) Tuner Section

RX-503BK

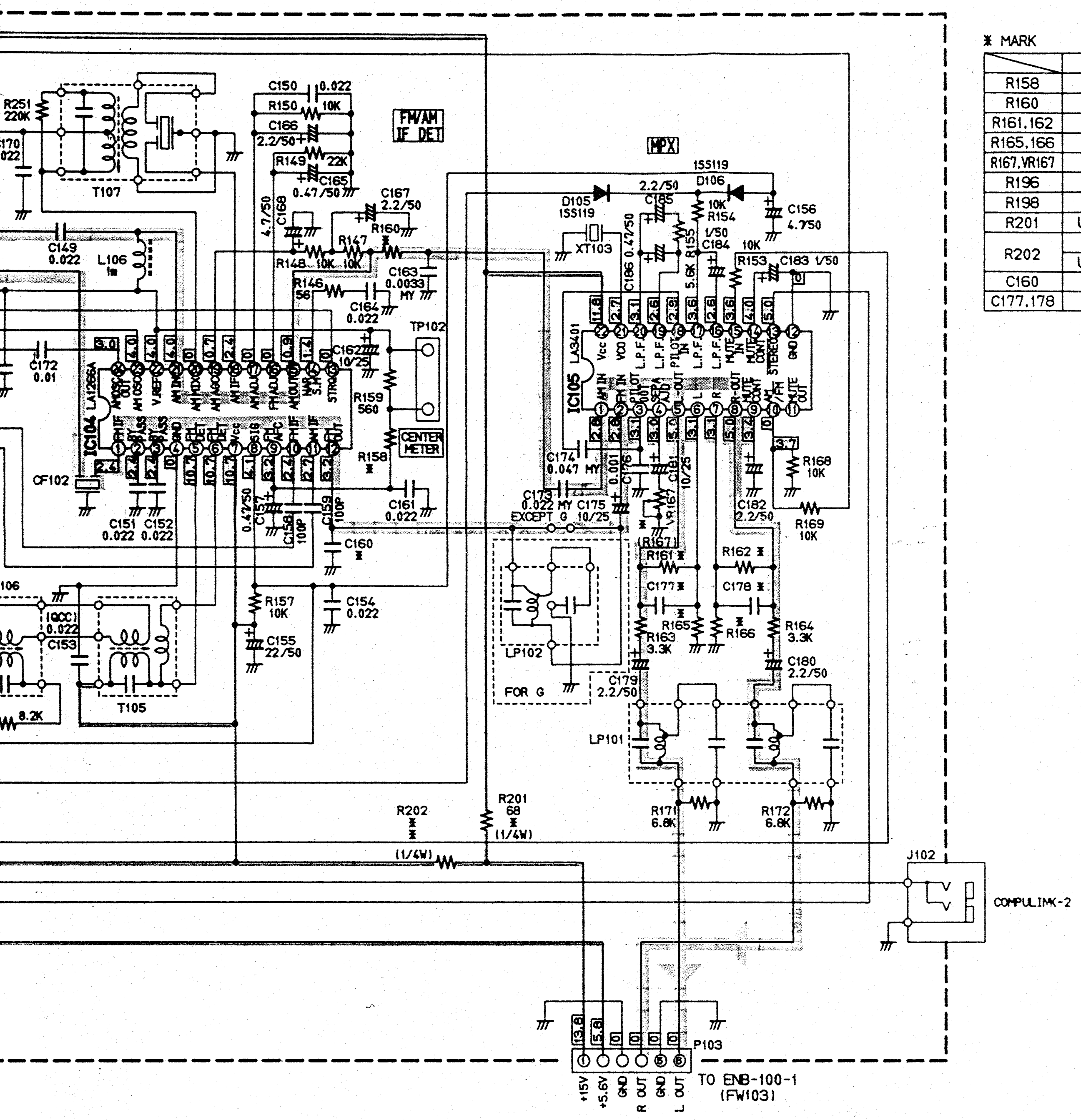


ENA-095-1
FM RF
FE101
EAF2203-001
ANT
ANT
NC
GND
VT
+B
IFOUT
OSCOUT
AT101
ANTENNA
75Ω
300Ω
GND
AM
AM RF
T101
TC105
VC105
SVC342(L)
T103
TP101 V.TUNE
C230
0.022
C200
0.01
Q103
2SC461
(B,C)
Q107
2SC535
(B,C)
Q108
2SC461
(B,C)
R122 2.7K
R123 1K
C101 0.022
C126 0.022
R119 220
R118 3.3K
CF101
R121 390
R124 680
C122 0.022
R126 220
R125 3.3K
R135 47
C137 220P(CH)
C138 240P(CH)
R133 47K
C136 18P
R132 10K
C135 0.022 (QCC)
R131 330
C133 0.022
C134 10/25
Q112
2SK301
(Q,R)
C132 560P
R136 10K
SF101
FE101
EAF2203-002
FOR G
R181 2.2K
R199 4.7K
C196 0.001
R197 2.2K
C195 0.47/50
R198
Q126
2SC458
(D)
Q125
2SK301
(Q2)
R196
R182 180
9K
10K
SW202
U.P.PG ONLY
P105
TO ENB-100-2 (FW105)
K2
T7
P101
TO ENB-100-2 (FW101)
TUNED
DCS
STEREO
MUTE
SI
CK
SO
STB
R194 4.7K
C192 0.047(QCC)
IC102
LC7218
L101
R195 47K
XT102
C193 18P
C194 18P
PLL
D120 1SS119
R179 5.6K
D115 1SS119
R180 4.7K
Q127
AA1L4M
D104 1SS119
R186 100
R190 4.7K
D116 1SS119
Q123
AN1L4M
Q124
AN1L4M
R251 220K
C171 10/25
C170 0.022
T107
C149 0.022
L106
C169 0.022
C172 0.01
IC104
LA1266A
CF102
C151 0.022
C152 0.022
T106
C153
T105
R156 8.2K
R157 10K
C155 22/50
C150
R150
C166 2.2/50
R149
R148
C168

RX-503LBK

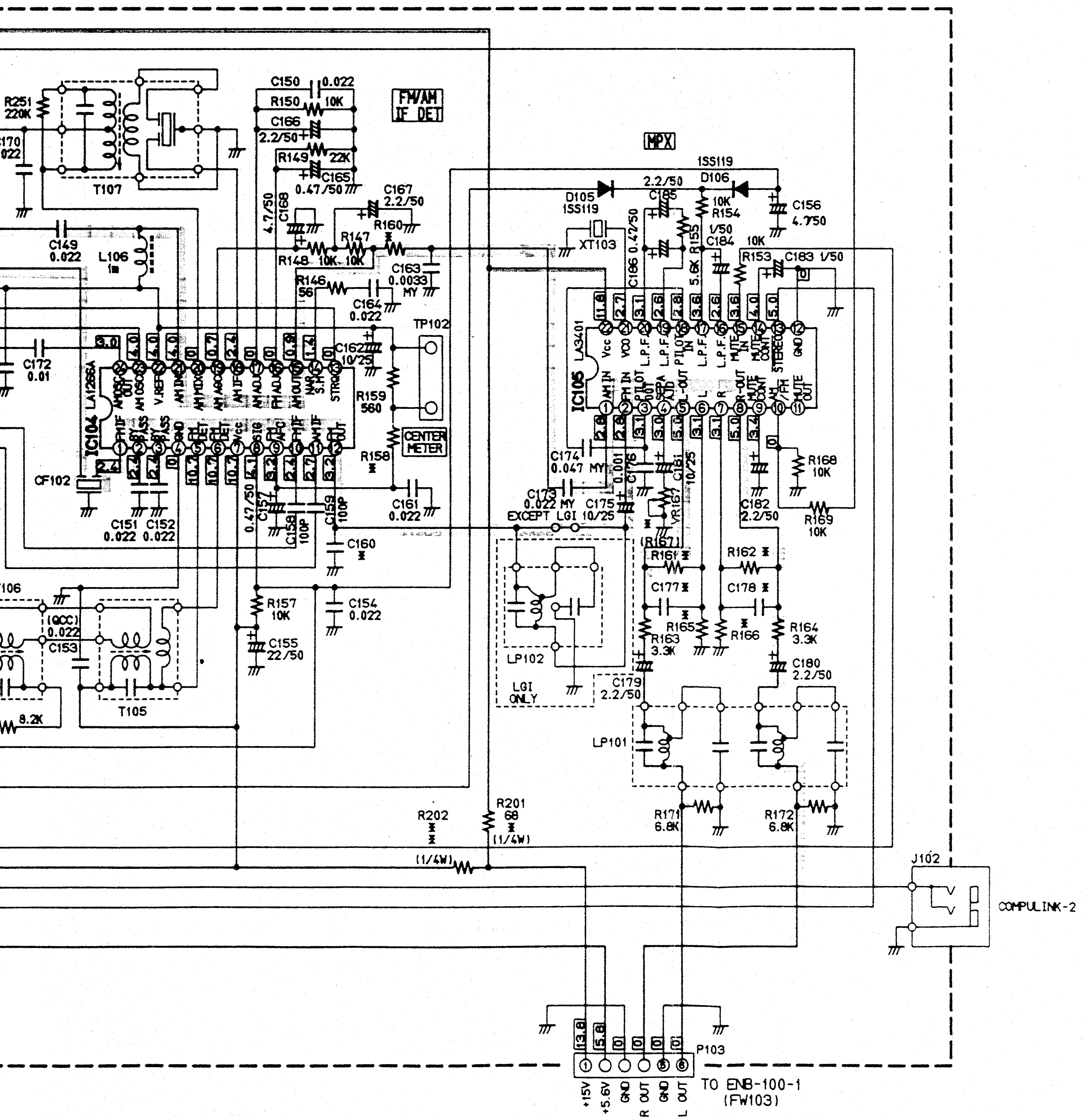


ENA-095-1
FM RF
FE101
EAF2203-001
ANT
ANT
NC
GND
VT
+B
IFOUT
OSCOUT
AT101
ANTENNA
75Ω
300Ω
GND
AM
AM RF
T102
TC106
T101
TC105
Q111
2SD1302 (S,T)
R141 4.7K
C141 27P
VC106
SVC342(L)
VC105
SVC342(L)
R143 10K
R144 47K
C146 68P
C147 22P (CH)
C148 120P(CH)
T104
Q115
2SK301(P,Q)
R145 10K
C139 0.022 (QCC)
C137 220P(CH)
C138 240P(CH)
T103
Q114
2SK301(P,Q)
R134 10K
R133 47K
C136 18P
R132 10K
C135 0.022 (QCC)
R142 330
C143 0.022
C144 10/25
Q113
2SK301
(Q,R)
D110 1SS119
C142 0.0027
C133 0.022
C134 10/25
Q112
2SK301
(Q,R)
R131 330
D109 1SS119
C132 560P
R136 10K
TP101 V.TUNE
C230 0.022
C200 0.01
Q103
2SC461
(B,C)
Q107
2SC535
(B,C)
Q108
2SC461
(B,C)
R122 2.7K
R123 1K
C101 0.022
C126 0.022
R119 220
R118 3.3K
CF101
R121 390
R124 680
C122 0.022
R126 220
R125 3.3K
R135 47
SF101
SF101 LGI ONLY
FE101
EAF2203-002 (LGI)
FOR LGI.LE
R181 2.2K
R199 4.7K
C196 0.001
R197 2.2K
C195 0.47/50
R198
Q126
2SC458
(D)
Q125
2SK301
(Q2)
R196
R182 180
P101
TO ENB-100-2 (FW101)
TUNED
DCS
STEREO
MUTE
SI
CK
SO
STB
R194 4.7K
C192 0.047(QCC)
IC102
LC7218
L101
R195 47K
XT102
C193 18P
C194 18P
PLL
D120 1SS119
R179 5.6K
D115 1SS119
R180 4.7K
Q127
AA1L4M
D104 1SS119
R186 100
R190 4.7K
D116 1SS119
Q121
AN1L4M
Q123
AN1L4M
Q124
AN1L4M
D102 1SS119
D103 1SS119
R251 220K
C171 10/25
C170 0.022
T107
C149 0.022
L106
C169 0.022
C172 0.01
IC104
LA1266A
CF102
C151 0.022
C152 0.022
T106
C153
T105
R156 8.2K
R157 10K
C155 22/50
C150
R150
C166 2.2/50
R149
R148
C168


FM/AM IF DET
MPX
IC104 LA1266A
IC105 LA3401
T107
T105
L106
CF102
XT103
D105 1SS119
D106 1SS119
TP102
CENTER METER
LP102
FOR G
EXCEPT G
LP101
R201 68 (1/4W)
R202 (1/4W)
J102
COMPULINK-2
P103
+15V
+5.6V
GND
R OUT
GND
L OUT
TO ENB-100-1 (FW103)

¥ MARK

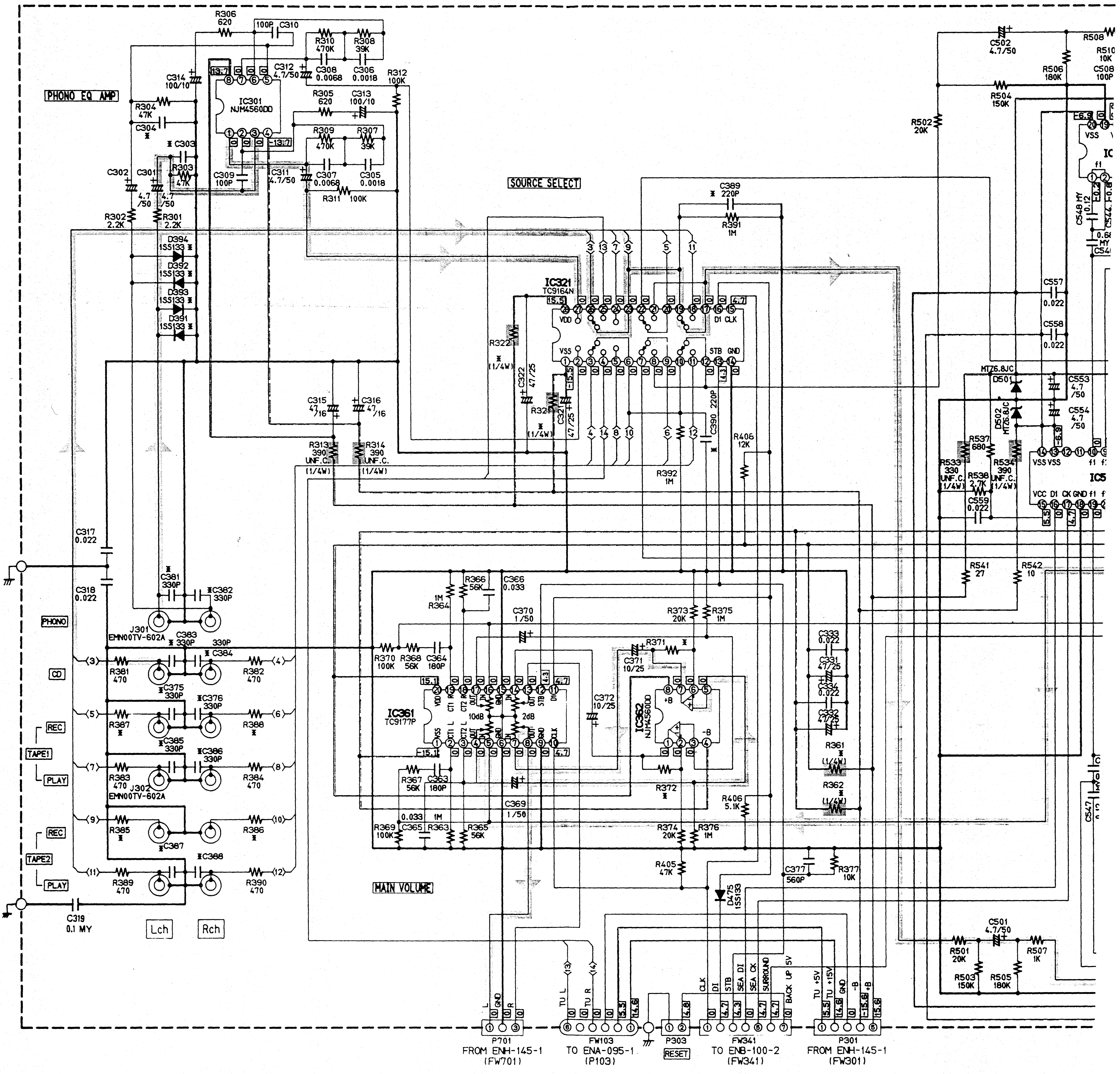
	J.C	U.P.PG.UE	A	E.LE.LBS.LEV	G.LGI
R158	18K	27K	27K	27K	27K
R160	12K	12K	22K	22K	22K
R161.162	120K	120K	180K	180K	180K
R165.166	180K	180K	270K	270K	270K
R167.VR167	39K	39K	100K VR	100K VR	100K VR
R196	10K	10K	10K	2.2K	2.2K
R198	3.3K	3.3K	3.3K	8.2K	8.2K
R201	UNF.C.	UNF.C.	UNF.F.	UNF.F.	UNF.F.
R202	47	47	47	47	22
	UNF.C.	UNF.C.	UNF.F.	UNF.F.	UNF.F.
C160	220P	220P	220P	100P	220P
C177.178	560P	560P	270P	270P	270P


FM/AM IF DET
MPX
IC104 LA1266A
IC105 LA3401
T107
T105
L106
CF102
XT103
D105 1SS119
D106 1SS119
TP102
CENTER METER
LP102
LGI ONLY
EXCEPT LGI
LP101
R201 68 (1/4W)
R202 (1/4W)
J102
COMPULINK-2
P103
+15V
+5.6V
GND
R OUT
GND
L OUT
TO ENB-100-1 (FW103)

Notes:

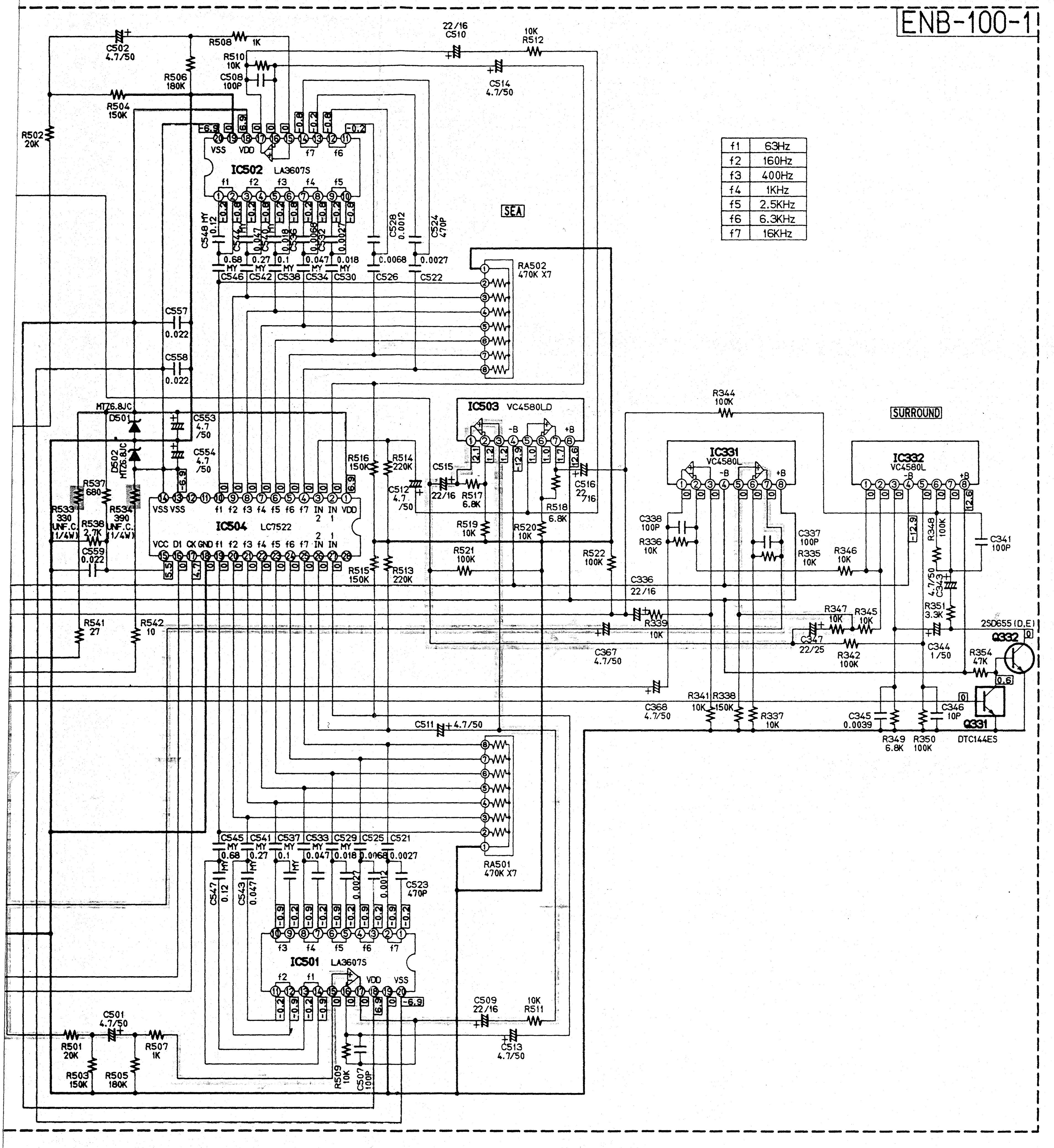
1. ━━━ indicates + B power supply.
2. ╌╌╌ indicates − B power supply.
3. indicates signal path.
4. ☐ shows voltage.
5. When replacing the parts in the darkened area ( ) and those marked with ⚠, be sure to use the designated parts to ensure safety.
   This is the standard circuit diagram.
6. The design and contents are sudject to change wthout notice.

(2) Sourse Select & SEA Control Section


PHONO EQ AMP
IC301
NJM4560DD
SOURCE SELECT
IC321
TC9164N
MAIN VOLUME
IC361
TC9177P
IC362
NJM4560DD
PHONO
CD
TAPE1
REC
PLAY
TAPE2
J301
EMN00TV-602A
J302
EMN00TV-602A
Lch
Rch
D391
D392
D393
D394
1SS133
MTZ6.8JC
D501
D502
D405
1SS133
R306 620
C310 100P
R310 470K
R308 39K
C308 0.0068
C306 0.0018
R312 100K
C312 4.7/50
C314 100/10
R304 47K
C304
R305 620
C313 100/10
R309 470K
R307 39K
C307 0.0068
C305 0.0018
R311 100K
C309 100P
C311 4.7/50
C303
R303 47K
C302 4.7/50
C301 4.7/50
R302 2.2K
R301 2.2K
C389 220P
R391 1M
R322 (1/4W)
C322 47/25
R321 (1/4W)
C321 47/25
C315 47/16
C316 47/16
R313 390 UNF.C. (1/4W)
R314 390 UNF.C. (1/4W)
C390 220P
R405 12K
R392 1M
C317 0.022
C318 0.022
C319 0.1 MY
C381 330P
C382 330P
C383 330P
C384 330P
R381 470
R382 470
C375 330P
C376 330P
R387
R388
C385 330P
C386 330P
R383 470
R384 470
R385
R386
C387
C388
R389 470
R390 470
R364 1M
R366 56K
C366 0.033
C370 1/50
R370 100K
R368 56K
C364 180P
R371
C371 10/25
C372 10/25
R373 20K
R375 1M
C333 0.022
C331 47/25
C334 0.022
C332 47/25
R361 (1/4W)
R362 (1/4W)
R367 56K
C363 180P
R372
C369 1/50
R369 100K
C365 0.033
R363 1M
R365 56K
R374 20K
R376 1M
R406 5.1K
R405 47K
C377 560P
R377 10K
C502 4.7/50
R508
R510 10K
R506 180K
C508 100P
R504 150K
R502 20K
C548 MY 0.12
C557 0.022
C558 0.022
C553 4.7/50
C554 4.7/50
R537 680
R533 330 UNF.C. (1/4W)
R534 390 UNF.C. (1/4W)
R538 2.7K
C559 0.022
R541 27
R542 10
C501 4.7/50
R501 20K
R507 1K
R503 150K
R505 180K
C547
VDD
VSS
D1
CLK
STB
GND
CT1
CT2
OUT
10dB
2dB
+B
-B
VCC
DI
CK
f1
L
GND
R
TU L
TU R
CLK
DI
STB
SEA DI
SEA CK
SURROUND
BACK UP 5V
TU +5V
TU +15V
GND
-B
+B
P701
FROM ENH-145-1
(FW701)
FW103
TO ENA-095-1
(P103)
P303
RESET
FW341
TO ENB-100-2
(FW341)
P301
FROM ENH-145-1
(FW301)

✱ MARK

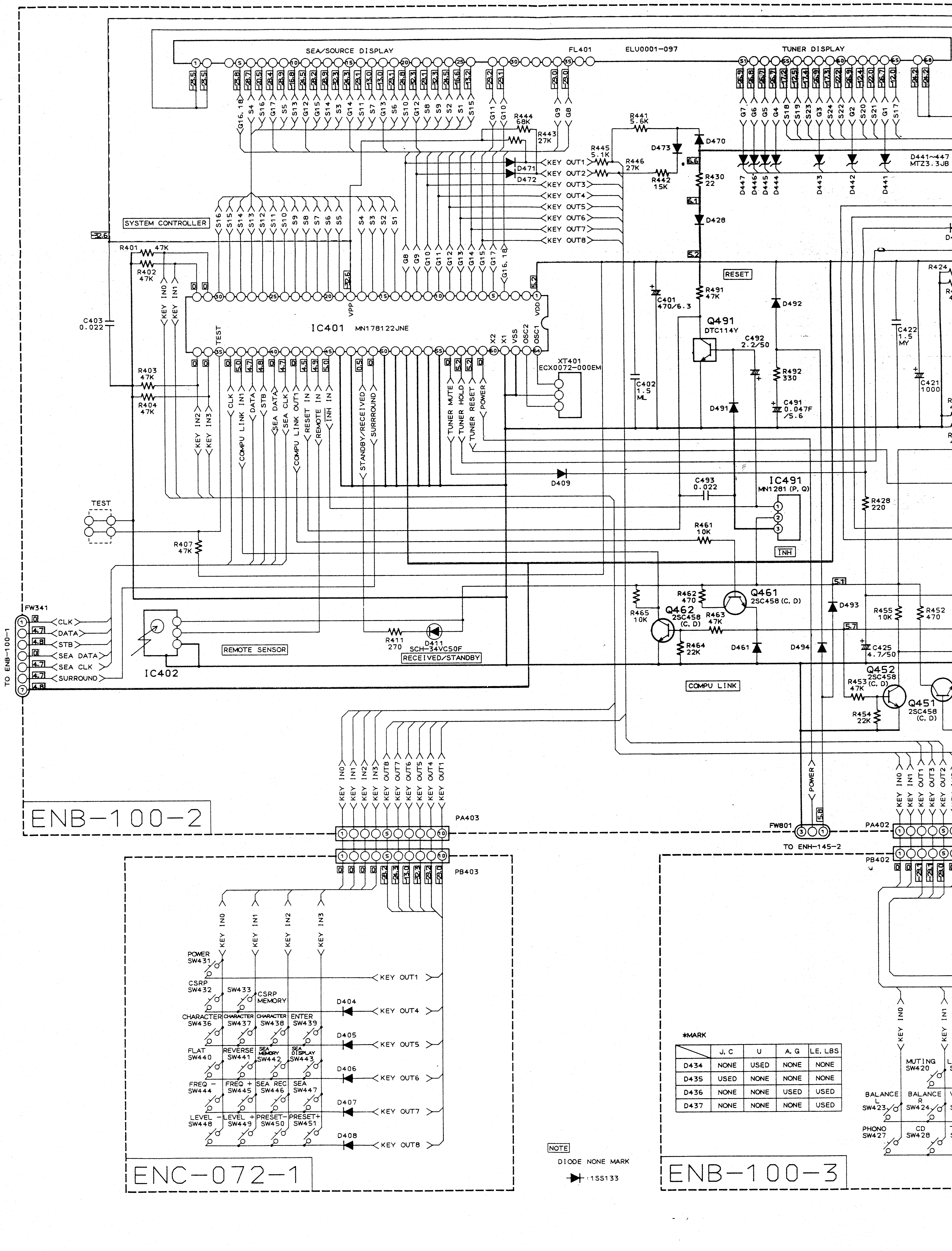
	J,C	U	E,A	LE,LBS	G
R321,322	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
	68	47	47	47	47
R361,362	UNF.C.	UNF.F.	UNF.F.	UNF.F.	UNF.F.
	68	47	47	47	47
R371,372	15K	10K	10K	10K	10K
R385-388	470	470	470	470	2.2K
C303,304	100P	100P	100P	100P	470P
C375,376	NONE	NONE	NONE	NONE	USED
C381-388	NONE	NONE	NONE	NONE	USED
D391-394	USED	USED	USED	USED	NONE
C389,390	1000P	1000P	1000P	1000P	560P


ENB-100-1
SEA
SURROUND
IC502 LA3607S
IC501 LA3607S
IC503 VC4580LD
IC504 LC7522
IC331 VC4580L
IC332 VC4580L
RA502 470K X7
RA501 470K X7
Q332 2SD655(D,E)
Q331 DTC144ES
D501 MTZ6.8JC
D502 MTZ6.8JC
C502 4.7/50
R508 1K
C510 22/16
R512 10K
R510 10K
C508 100P
C514 4.7/50
R506 180K
R504 150K
R502 20K
C557 0.022
C558 0.022
C553 4.7/50
C554 4.7/50
R537 680
R533 330 UNF.C. (1/4W)
R538 2.7K
R534 390 UNF.C. (1/4W)
C559 0.022
R516 150K
R514 220K
C515 22/16
R517 6.8K
C512 4.7/50
C516 22/16
R518 6.8K
R519 10K
R520 10K
R521 100K
R522 100K
R515 150K
R513 220K
R541 27
R542 10
C511 4.7/50
R344 100K
C338 100P
R336 10K
C337 100P
R335 10K
R346 10K
C336 22/16
R339 10K
C367 4.7/50
R347 10K
R345 10K
C347 22/25
R342 100K
C368 4.7/50
R341 10K
R338 150K
R337 10K
C345 0.0039
R349 6.8K
R350 100K
C346 10P
C344 1/50
R354 47K
R351 3.3K
C343 4.7/50
R348 100K
C341 100P
C501 4.7/50
R501 20K
R507 1K
R503 150K
R505 180K
R509 10K
C507 100P
C509 22/16
R511 10K
C513 4.7/50
C523 470P
C524 470P
C528 0.0012

f1	63Hz
f2	160Hz
f3	400Hz
f4	1KHz
f5	2.5KHz
f6	6.3KHz
f7	16KHz

SCHEMATIC DIAGRAM

(3) System Control & FL Driver Section


SEA/SOURCE DISPLAY
FL401
ELU0001-097
TUNER DISPLAY
SYSTEM CONTROLLER
IC401 MN178122JNE
VPP
VDD
TEST
X2
X1
VSS
OSC2
OSC1
XT401
ECX0072-000EM
R401 47K
R402 47K
R403 47K
R404 47K
C403 0.022
KEY IN0
KEY IN1
KEY IN2
KEY IN3
CLK
COMPU LINK IN1
DATA
STB
SEA DATA
SEA CLK
COMPU LINK OUT1
RESET IN
REMOTE IN
INH IN
STANDBY/RECEIVED
SURROUND
TUNER MUTE
TUNER HOLD
TUNER RESET
POWER
KEY OUT1
KEY OUT2
KEY OUT3
KEY OUT4
KEY OUT5
KEY OUT6
KEY OUT7
KEY OUT8
R444 68K
R443 27K
R441 5.6K
R445 5.1K
R446 27K
R442 15K
D470
D471
D472
D473
R430 22
D428
D441~447 MTZ3.3JB
RESET
R491 47K
Q491 DTC114Y
C401 470/6.3
C402 1.5 ML
C492 2.2/50
R492 330
C491 0.047F /5.6
D491
D492
C422 1.5 MY
C421 1000
R424
D409
C493 0.022
IC491 MN1281 (P, Q)
INH
R428 220
R461 10K
TEST
R407 47K
FW341
TO ENB-100-1
IC402
REMOTE SENSOR
R411 270
D411 SCH-34VC50F
RECEIVED/STANDBY
R462 470
Q461 2SC458 (C, D)
Q462 2SC458 (C, D)
R463 47K
R464 22K
R465 10K
D461
COMPU LINK
D493
D494
R455 10K
R452 470
C425 4.7/50
Q452 2SC458 (C, D)
R453 47K
R454 22K
Q451 2SC458 (C, D)
FW801
TO ENH-145-2
PA403
PB403
PA402
PB402
ENB-100-2
POWER SW431
CSRP SW432
SW433 CSRP MEMORY
CHARACTER SW436
CHARACTER SW437
CHARACTER SW438
ENTER SW439
FLAT SW440
REVERSE SW441
SEA MEMORY SW442
SEA DISPLAY SW443
FREQ − SW444
FREQ + SW445
SEA REC SW446
SEA SW447
LEVEL − SW448
LEVEL + SW449
PRESET− SW450
PRESET+ SW451
D404
D405
D406
D407
D408
ENC-072-1
MUTING SW420
BALANCE L SW423
BALANCE R SW424
PHONO SW427
CD SW428
ENB-100-3

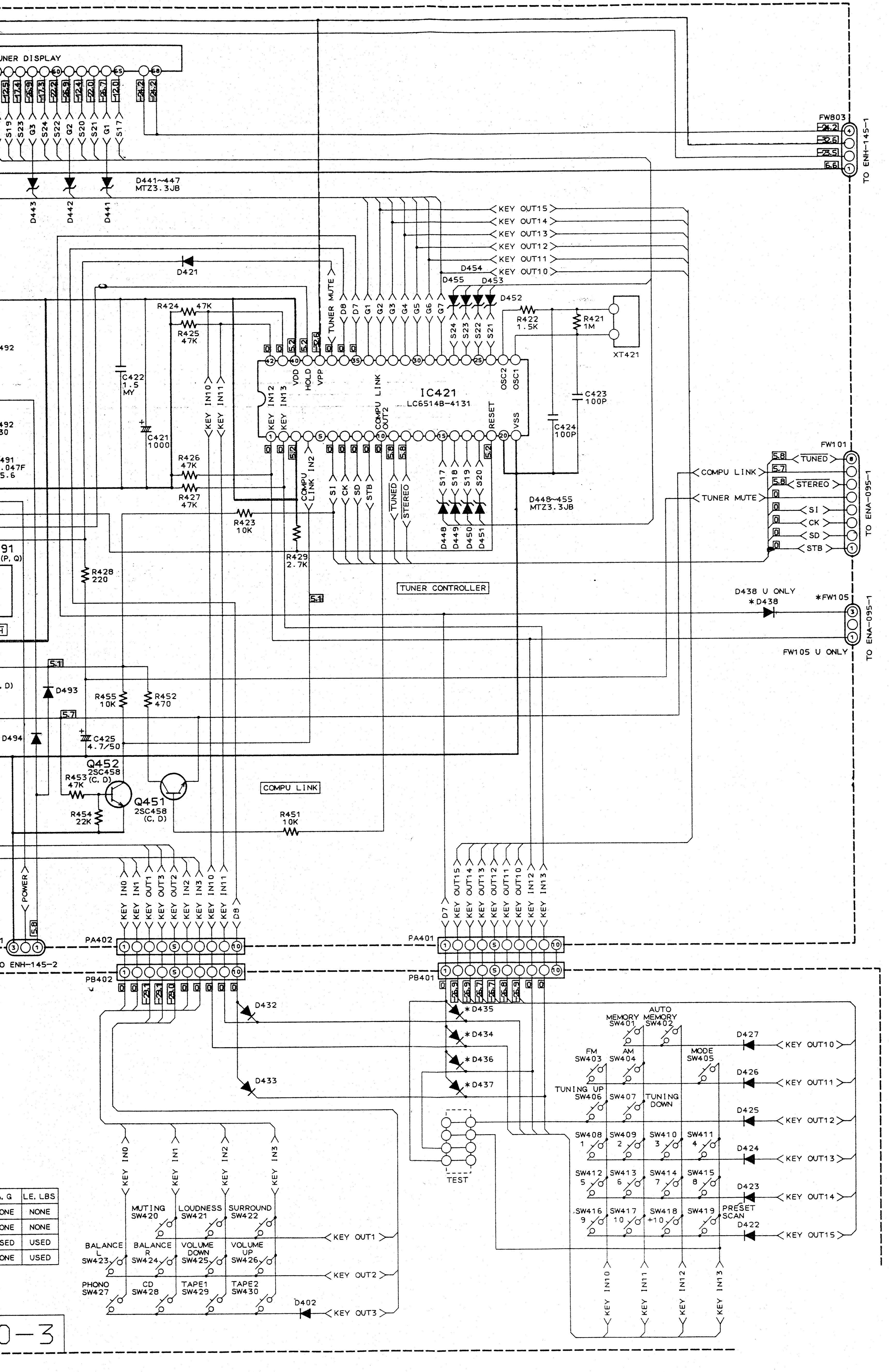
*MARK

	J, C	U	A, G	LE, LBS
D434	NONE	USED	NONE	NONE
D435	USED	NONE	NONE	NONE
D436	NONE	NONE	USED	USED
D437	NONE	NONE	NONE	USED

NOTE

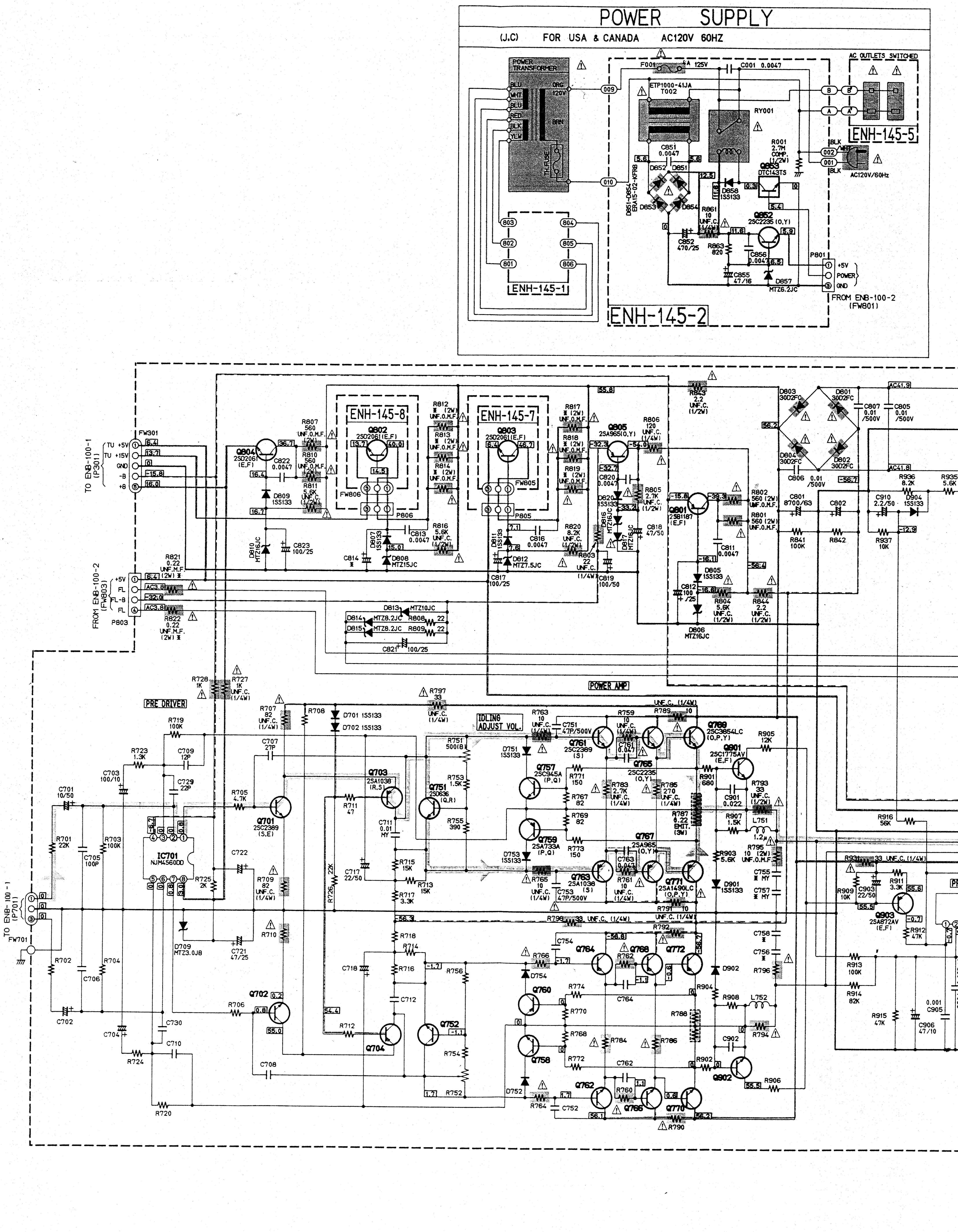
DIODE NONE MARK

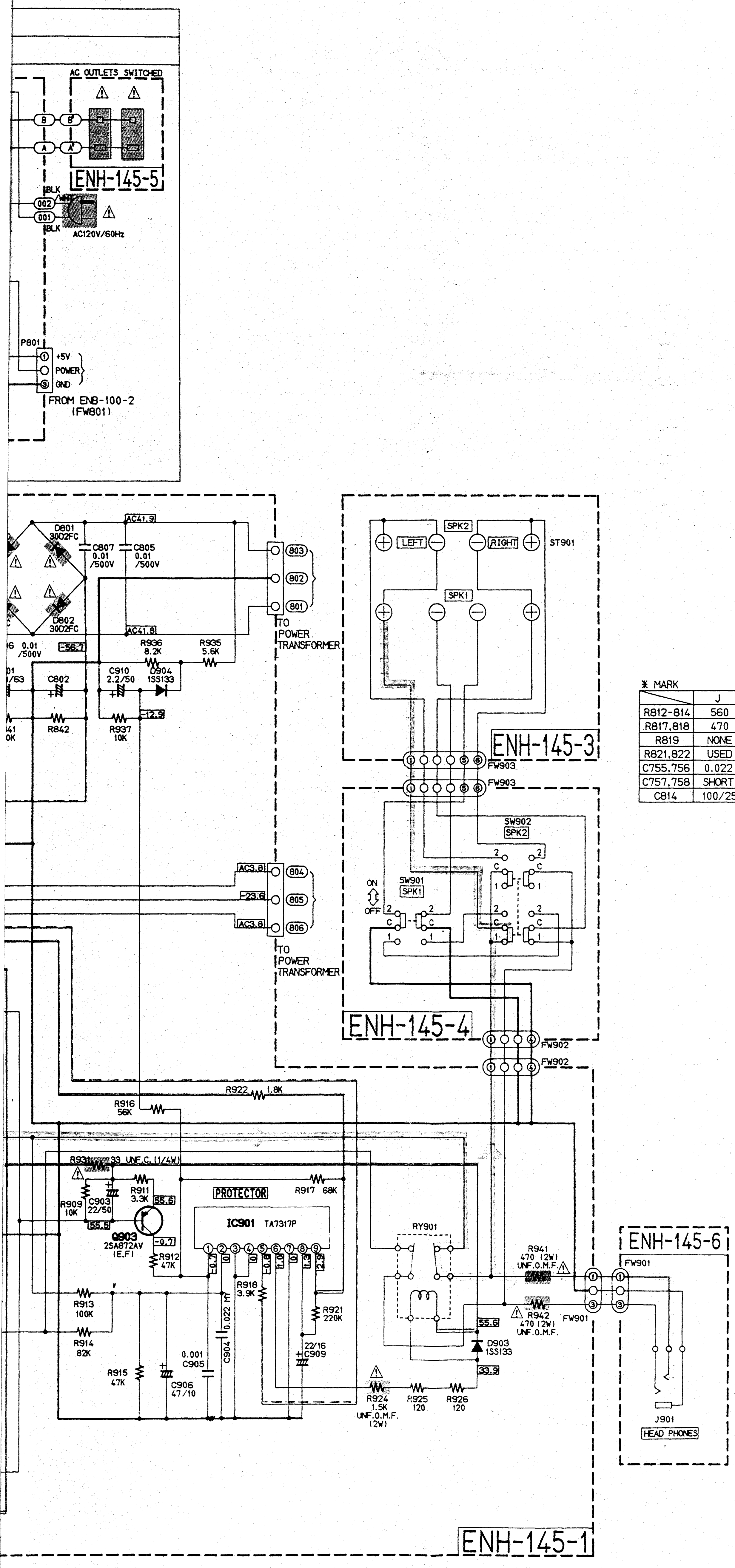
: 1SS133


UNER DISPLAY
S19
S23
G3
S24
S22
G2
S20
S21
G1
S11
D441~447
MTZ3.3JB
D443
D442
D441
FW803
TO ENH-145-1
KEY OUT15
KEY OUT14
KEY OUT13
KEY OUT12
KEY OUT11
KEY OUT10
D421
D454
D455
D453
D452
R424 47K
R425 47K
R422 1.5K
R421 1M
XT421
TUNER MUTE
D8
D7
G1
G2
G3
G4
G5
G6
G7
S24
S23
S22
S21
VDD
HOLD
VPP
OSC2
OSC1
IC421
LC6514B-4131
KEY IN12
KEY IN13
COMPU LINK OUT2
RESET
VSS
C422 1.5 MY
C421 1000
C423 100P
C424 100P
KEY IN10
KEY IN11
R426 47K
R427 47K
R423 10K
R429 2.7K
COMPU LINK IN2
SI
CK
SD
STB
TUNED
STEREO
S17
S18
S19
S20
D448
D449
D450
D451
D448~455
MTZ3.3JB
FW101
TUNED
COMPU LINK
STEREO
TUNER MUTE
SI
CK
SD
STB
TO ENA-095-1
TUNER CONTROLLER
D438 U ONLY
*D438
*FW105
FW105 U ONLY
TO ENA-095-1
R428 220
D493
D494
R455 10K
R452 470
C425 4.7/50
Q452 2SC458 (C, D)
R453 47K
R454 22K
Q451 2SC458 (C, D)
COMPU LINK
R451 10K
POWER
KEY IN0
KEY IN1
KEY OUT1
KEY OUT3
KEY OUT2
KEY IN2
KEY IN3
KEY IN10
KEY IN11
D8
D7
KEY OUT15
KEY OUT14
KEY OUT13
KEY OUT12
KEY OUT11
KEY OUT10
KEY IN12
KEY IN13
PA402
PA401
TO ENH-145-2
PB402
PB401
D432
D433
*D435
*D434
*D436
*D437
TEST
AUTO MEMORY SW402
MEMORY SW401
FM SW403
AM SW404
MODE SW405
TUNING UP SW406
SW407
TUNING DOWN
SW408 1
SW409 2
SW410 3
SW411 4
SW412 5
SW413 6
SW414 7
SW415 8
SW416 9
SW417 10
SW418 +10
SW419
PRESET SCAN
D427
D426
D425
D424
D423
D422
KEY IN0
KEY IN1
KEY IN2
KEY IN3
MUTING SW420
LOUDNESS SW421
SURROUND SW422
BALANCE L SW423
BALANCE R SW424
VOLUME DOWN SW425
VOLUME UP SW426
PHONO SW427
CD SW428
TAPE1 SW429
TAPE2 SW430
D402
KEY OUT1
KEY OUT2
KEY OUT3
KEY IN10
KEY IN11
KEY IN12
KEY IN13
.G
LE. LBS
ONE
NONE
ONE
NONE
SED
USED
ONE
USED
0-3

SM

(4) Power Amplifier & Power Supply Section

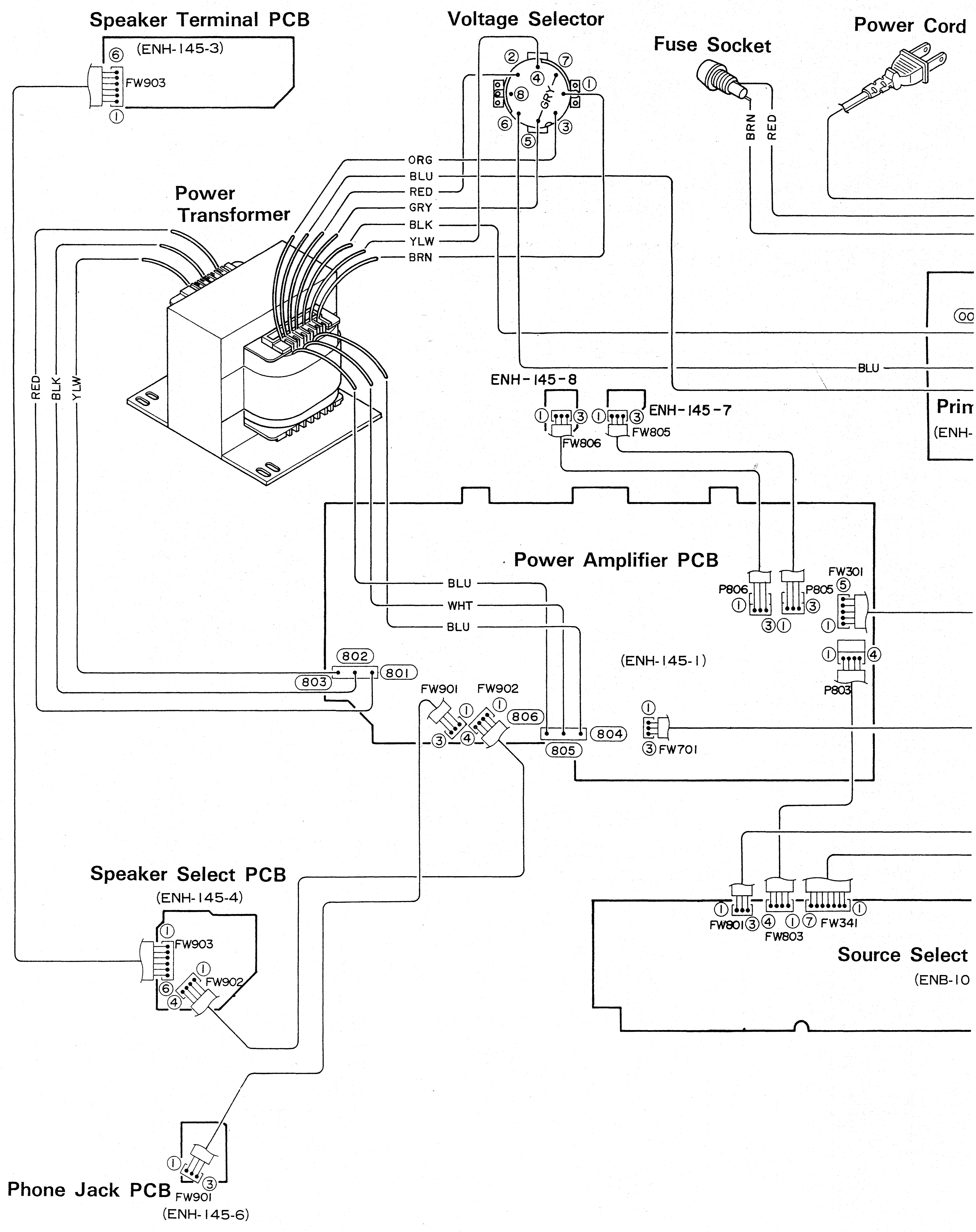

POWER SUPPLY
(J.C) FOR USA & CANADA AC120V 60HZ
POWER TRANSFORMER
BLU
WHT
BLU
RED
BLK
YLW
ORG
120V
BRN
TH.FUSE
F001 4A 125V
C001 0.0047
ETP1000-41JA
T002
RY001
AC OUTLETS SWITCHED
ENH-145-5
ENH-145-1
ENH-145-2
R001 2.7M COMP. (1/2W)
Q853 DTC143TS
Q852 2SC2235 (O,Y)
C851 0.0047
D851-D854 ERA15-02-KFR8
D858 1SS133
R861 10 UNF.C. (1/4W)
C852 470/25
R863 820
C856 0.0047
C855 47/16
D857 MTZ6.2JC
P801
+5V
POWER
GND
FROM ENB-100-2 (FW801)
AC120V/60Hz
TO ENB-100-1 (P301)
FW301
TU +5V
TU +15V
GND
-B
+B
FROM ENB-100-2 (FW803)
P803
ENH-145-8
Q802 2SD2061(E,F)
ENH-145-7
Q803 2SD2061(E,F)
Q804 2SD2061 (E,F)
Q805 2SA965(O,Y)
Q801 2SB1187 (E,F)
D801-D804 30D2FC
C807 0.01 /500V
C805 0.01 /500V
C806 0.01 /500V
C801 8700/63
C802
C910 2.2/50
D904 1SS133
R936 8.2K
R935 5.6K
R937 10K
R841 100K
R842
R843 2.2 UNF.C. (1/2W)
R821 0.22 UNF.M.F. (2W)
R822 0.22 UNF.M.F. (2W)
D813 MTZ10JC
D814 MTZ8.2JC
D815 MTZ8.2JC
R808 22
R809 22
C821 100/25
POWER AMP
PRE DRIVER
IDLING ADJUST VOL.
IC701 NJM4560DD
Q701 2SC2389 (S,E)
Q702
Q703 2SA1038 (R,S)
Q704
Q751 2SD636 (Q,R)
Q752
Q757 2SC945A (P,Q)
Q759 2SA733A (P,Q)
Q761 2SC2389 (S)
Q763 2SA1038 (S)
Q765 2SC2235 (O,Y)
Q767 2SA965 (O,Y)
Q769 2SC3854LC (O,P,Y)
Q771 2SA1490LC (O,P,Y)
Q901 2SC1775AV (E,F)
Q902
Q903 2SA872AV (E,F)
Q758
Q760
Q762
Q764
Q766
Q768
Q770
Q772
R751 500(B)
R787 0.22 EMIT. (3W)
L751 1.2µ
L752
D701 1SS133
D702 1SS133
D709 MTZ3.0JB
D901 1SS133
D902
TO ENB-100-1 (P701)
FW701
POWER AMP

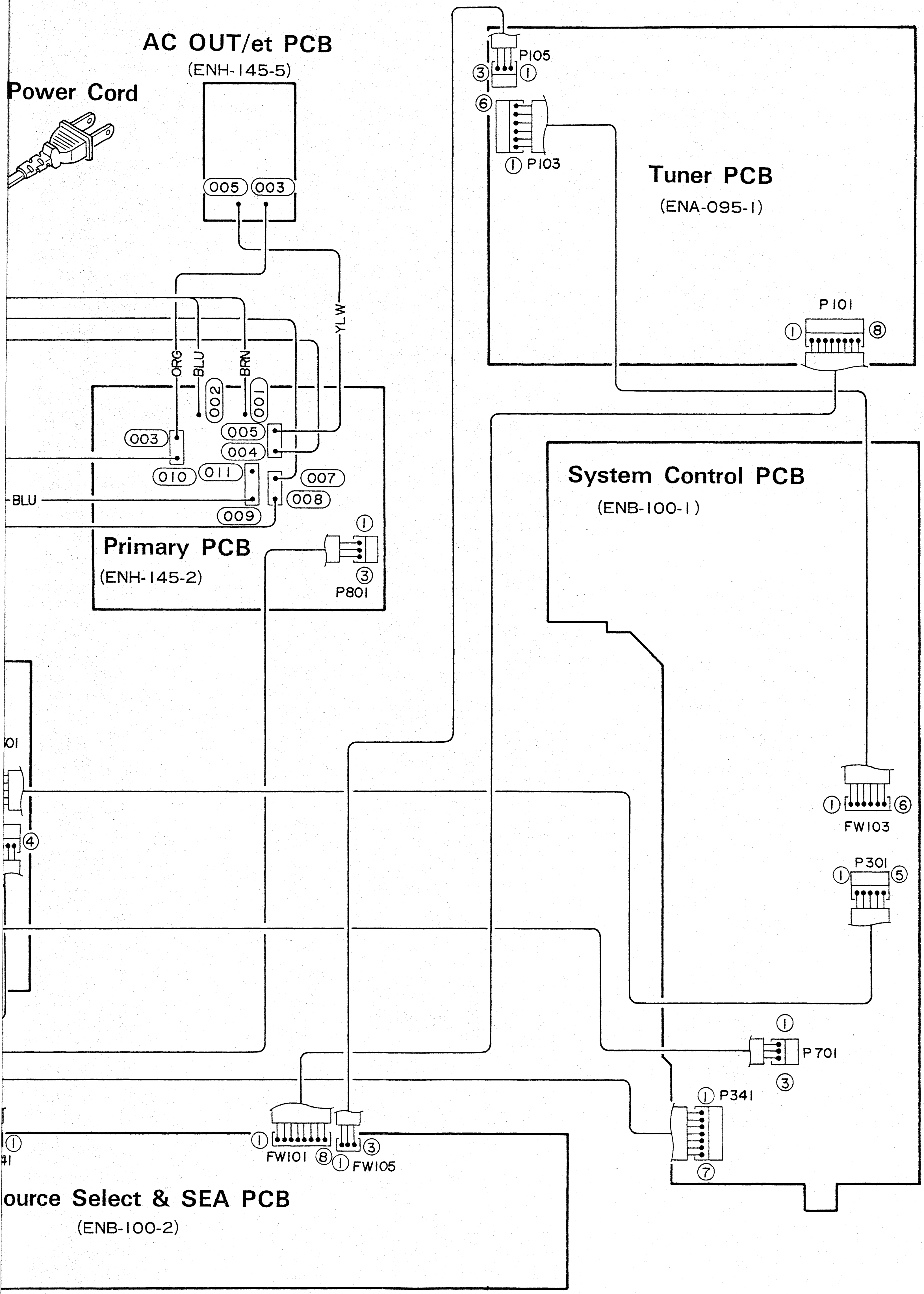

AC OUTLETS SWITCHED
B
A
ENH-145-5
BLK
WHT
002
001
BLK
AC120V/60Hz
P801
+5V
POWER
GND
FROM ENB-100-2
(FW801)
D801
3002FC
D802
3002FC
C807
0.01
/500V
C805
0.01
/500V
AC41.9
AC41.8
0.01
/500V
-56.7
C802
R842
R936
8.2K
R935
5.6K
C910
2.2/50
D904
1SS133
R937
10K
-12.9
803
802
801
TO
POWER
TRANSFORMER
AC3.8
-23.6
AC3.8
804
805
806
TO
POWER
TRANSFORMER
SPK2
LEFT
RIGHT
ST901
SPK1
ENH-145-3
FW903
FW903
SW902
SPK2
ON
OFF
SW901
SPK1
ENH-145-4
FW902
FW902
R922 1.8K
R916
56K
R931 33 UNF.C.(1/4W)
R909
10K
C903
22/50
R911
3.3K
55.6
55.5
Q903
2SA872AV
(E,F)
-0.7
R912
47K
PROTECTOR
R917 68K
IC901 TA7317P
-0.7
0
0
-0.8
1.0
0
1.3
2.9
R918
3.9K
R921
220K
22/16
C909
R913
100K
R914
82K
R915
47K
C906
47/10
0.001
C905
C904
0.022 MY
RY901
R941
470 (2W)
UNF.O.M.F.
R942
470 (2W)
UNF.O.M.F.
FW901
55.6
D903
1SS133
33.9
R924
1.5K
UNF.O.M.F.
(2W)
R925
120
R926
120
ENH-145-1
ENH-145-6
FW901
J901
HEAD PHONES

* MARK

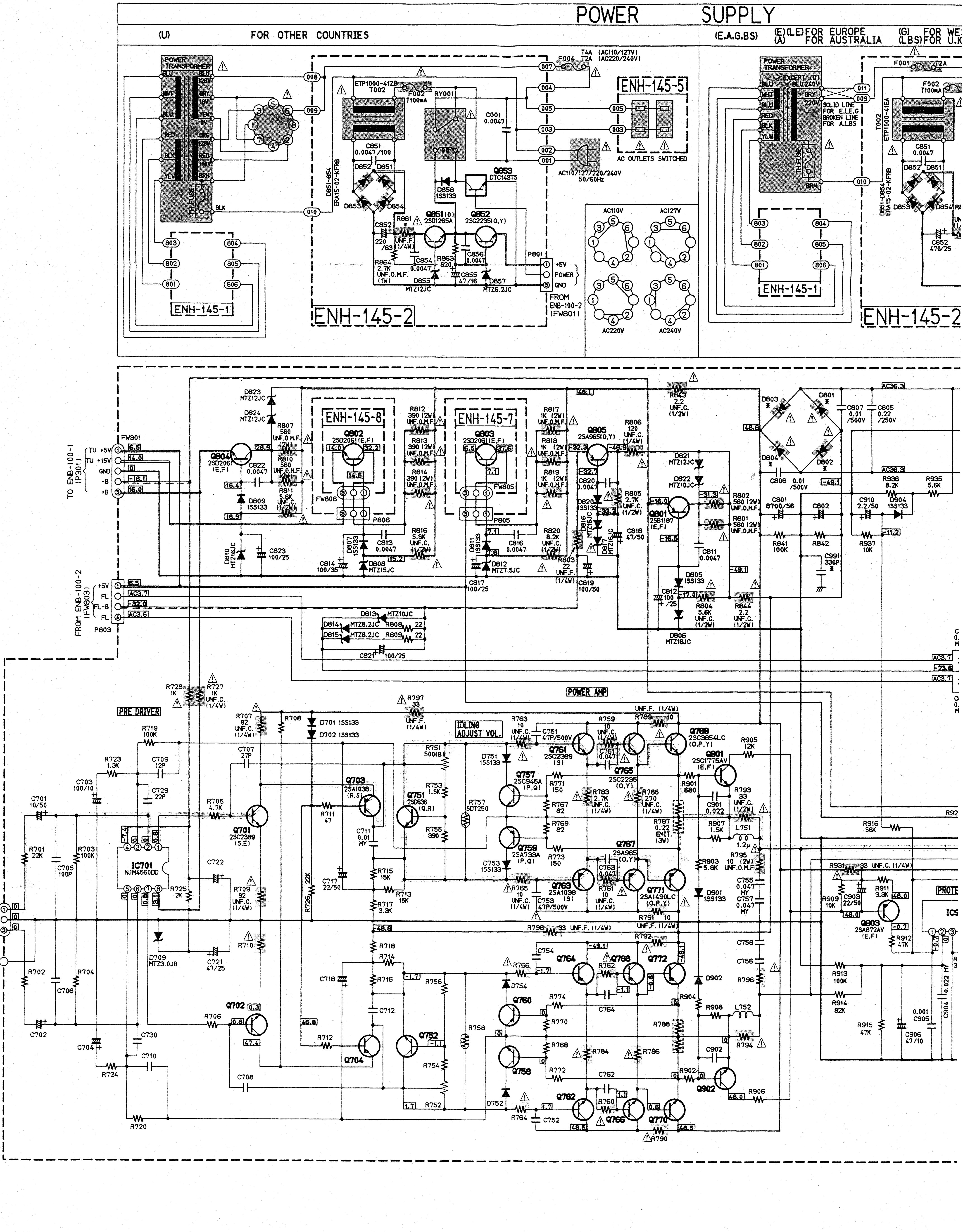
	J	C
R812-814	560	390
R817,818	470	1K
R819	NONE	1K
R821,822	USED	SHORT
C755,756	0.022	0.047
C757,758	SHORT	0.047
C814	100/25	100/35

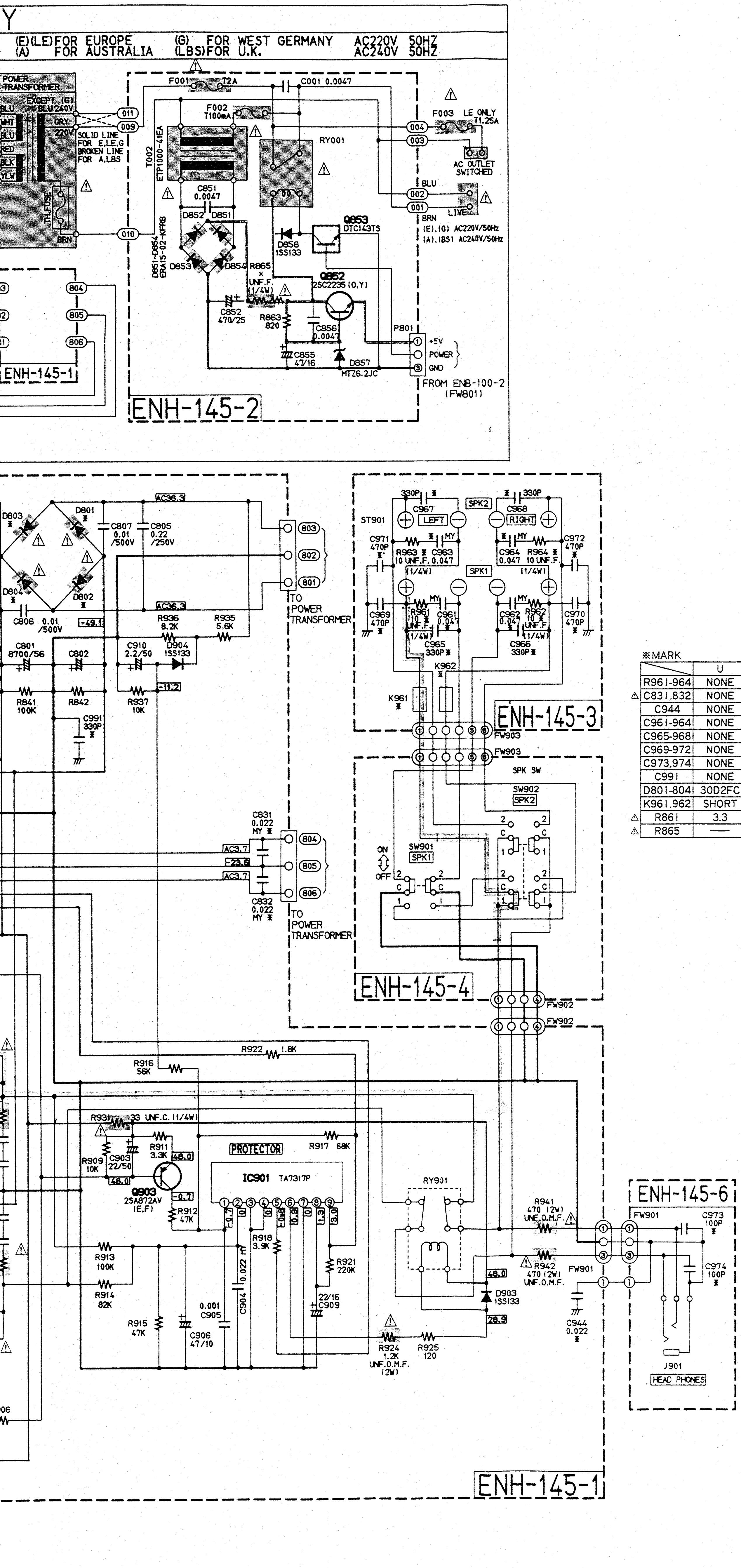
Connection Diagram


Speaker Terminal PCB
(ENH-145-3)
⑥
FW903
①
Voltage Selector
②
④
⑦
⑧
①
GRY
⑥
⑤
③
Fuse Socket
BRN
RED
Power Cord
Power Transformer
ORG
BLU
RED
GRY
BLK
YLW
BRN
RED
BLK
YLW
(00
BLU
Prin
(ENH-
ENH-145-8
①
③
FW806
ENH-145-7
①
③
FW805
Power Amplifier PCB
BLU
WHT
BLU
P806
①
③
①
P805
③
FW301
⑤
①
①
④
P803
(ENH-145-1)
802
803
801
FW901
FW902
①
③
④
①
806
804
805
①
③ FW701
Speaker Select PCB
(ENH-145-4)
①
FW903
⑥
①
FW902
④
①
FW801
③
④
FW803
①
⑦
FW341
①
Source Select
(ENB-10
Phone Jack PCB
①
③
FW901
(ENH-145-6)


AC OUT/et PCB
(ENH-145-5)
Power Cord
005
003
YLW
ORG
BLU
BRN
002
001
003
005
004
010
011
007
008
009
BLU
Primary PCB
(ENH-145-2)
①
③
P801
P105
③
①
⑥
① P103
Tuner PCB
(ENA-095-1)
P101
①
⑧
System Control PCB
(ENB-100-1)
01
④
①
⑥
FW103
P301
①
⑤
①
P701
③
① P341
⑦
①
41
①
FW101
⑧
① FW105
③
ource Select & SEA PCB
(ENB-100-2)

(5) Power Amplifier & Power Supply Section


POWER SUPPLY
(U) FOR OTHER COUNTRIES
(E,A,G,BS) (E)(LE) FOR EUROPE (A) FOR AUSTRALIA
(G) FOR WE (LBS) FOR U.K
POWER TRANSFORMER
TH.FUSE
ETP1000-41ZB T002
F002 T100mA
RY001
C001 0.0047
F004 T4A (AC110/127V) T2A (AC220/240V)
ENH-145-5
AC OUTLETS SWITCHED
AC110/127/220/240V 50/60Hz
C851 0.0047/100
D851-D854 ERA15-02-KFR8
Q853 DTC143TS
D858 1SS133
Q851 2SD1265A
Q852 2SC2235(O,Y)
R861 UNF.F. (1/4W)
C852 220/63
R864 2.7K UNF.O.M.F. (1W)
C854 0.0047
R863 820
C856 0.0047
C855 47/16
D855 MTZ12JC
D857 MTZ6.2JC
P801 +5V POWER GND
FROM ENB-100-2 (FW801)
AC110V AC127V AC220V AC240V
ENH-145-1
ENH-145-2
EXCEPT (G) BLU 240V GRY 220V
SOLID LINE FOR E,LE,G BROKEN LINE FOR A,LBS
ETP1000-41EA T002
F001 T2A
F002 T100mA
C851 0.0047
C852 470/25
TO ENB-100-1 (P301)
FW301 TU +5V TU +15V GND -B +B
FROM ENB-100-2 (FW803)
P803 +5V FL FL-B FL
ENH-145-8
ENH-145-7
Q804 2SD2061 (E,F)
Q802 2SD2061(E,F)
Q803 2SD2061(E,F)
Q805 2SA965(O,Y)
Q801 2SB1187 (E,F)
D823 MTZ12JC
D824 MTZ12JC
D809 1SS133
D810 MTZ16JC
D807 1SS133
D808 MTZ15JC
D811 1SS133
D812 MTZ7.5JC
D816 MTZ16JC
D817 MTZ16JC
D820 1SS133
D821 MTZ12JC
D822 MTZ10JC
D805 1SS133
D806 MTZ16JC
D813 MTZ10JC
D814 MTZ8.2JC
D815 MTZ8.2JC
D801 D802 D803 D804
R843 2.2 UNF.C. (1/2W)
C807 0.01 /500V
C805 0.22 /250V
C806 0.01 /500V
C801 8700/56
C802
C991 330P
R841 100K
R842
R936 8.2K
R935 5.6K
R937 10K
C910 2.2/50
D904 1SS133
P806 FW806 P805 FW805
PRE DRIVER
POWER AMP
IDLING ADJUST VOL.
IC701 NJM4560DD
TO ENB-100-1 (P701) FW701
Q701 2SC2389 (S,E)
Q702
Q703 2SA1038 (R,S)
Q704
Q751 2SD636 (Q,R)
Q752
Q757 2SC945A (P,Q)
Q758
Q759 2SA733A (P,Q)
Q760
Q761 2SC2389 (S)
Q762
Q763 2SA1038 (S)
Q764
Q765 2SC2235 (O,Y)
Q766
Q767 2SA965 (O,Y)
Q768
Q769 2SC3854LC (O,P,Y)
Q770
Q771 2SA1490LC (O,P,Y)
Q772
Q901 2SC1775AV (E,F)
Q902
Q903 2SA872AV (E,F)
D701 1SS133
D702 1SS133
D709 MTZ3.0JB
D751 1SS133
D753 1SS133
D752 D754
D901 1SS133
D902
R751 500(B)
R757 SDT250
R787 0.22 EMIT. (3W)
R788
L751 1.2μ
L752
PROTE
ICS


Y
(E)(LE)FOR EUROPE (G) FOR WEST GERMANY AC220V 50HZ
(A) FOR AUSTRALIA (LBS)FOR U.K. AC240V 50HZ
POWER TRANSFORMER
EXCEPT (G)
BLU 240V
GRY 220V
SOLID LINE FOR E.LE.G
BROKEN LINE FOR A.LBS
TH.FUSE
F001 T2A
C001 0.0047
F002 T100mA
T002 ETP1000-41EA
RY001
F003 LE ONLY T1.25A
AC OUTLET SWITCHED
BLU
BRN
LIVE
(E),(G) AC220V/50Hz
(A),(BS) AC240V/50Hz
C851 0.0047
D851-D854 ERA15-02-KFR8
D858 1SS133
Q853 DTC143TS
Q852 2SC2235 (O,Y)
R865 UNF.F. (1/4W)
C852 470/25
R863 820
C856 0.0047
C855 47/16
D857 MTZ6.2JC
P801
+5V
POWER
GND
FROM ENB-100-2 (FW801)
ENH-145-2
ENH-145-1
D801 D802 D803 D804
C807 0.01 /500V
C805 0.22 /250V
AC36.3
TO POWER TRANSFORMER
C806 0.01 /500V
-49.1
C801 8700/56
C802
R936 8.2K
R935 5.6K
C910 2.2/50
D904 1SS133
R841 100K
R842
R937 10K
-11.2
C991 330P
C831 0.022 MY
AC3.7
-23.6
C832 0.022 MY
ST901
C967 LEFT
SPK2
C968 RIGHT
330P
C971 470P
R963 10 UNF.F.
C963 0.047
C964 0.047
R964 10 UNF.F.
C972 470P
SPK1
C969 470P
R961 10 UNF.F.
C961 0.047
C962 0.047
R962 10 UNF.F.
C970 470P
C965 330P
C966 330P
K961 K962
ENH-145-3
FW903
SPK SW
SW902 SPK2
SW901 SPK1
ON OFF
ENH-145-4
FW902
R922 1.8K
R916 56K
R931 33 UNF.C. (1/4W)
R917 68K
PROTECTOR
IC901 TA7317P
R911 3.3K
R909 10K
C903 22/50
48.0
Q903 2SA872AV (E,F)
-0.7
R912 47K
R913 100K
R914 82K
R915 47K
C906 47/10
C905 0.001
C904 0.022 MY
R918 3.9K
R921 220K
C909 22/16
RY901
R941 470 (2W) UNF.O.M.F.
R942 470 (2W) UNF.O.M.F.
D903 1SS133
26.9
R924 1.2K UNF.O.M.F. (2W)
R925 120
FW901
C944 0.022
ENH-145-6
C973 100P
C974 100P
J901
HEAD PHONES

※MARK

	U	⚠ E, A	G, GI	⚠ BS
R961-964	NONE	NONE	USED	NONE
⚠ C831,832	NONE	NONE	USED	NONE
C944	NONE	NONE	USED	NONE
C961-964	NONE	NONE	USED	NONE
C965-968	NONE	NONE	USED	NONE
C969-972	NONE	NONE	USED	NONE
C973,974	NONE	NONE	USED	NONE
C991	NONE	NONE	USED	NONE
D801-804	30D2FC	30D2FC	30DF2SFC	30D2FC
K961,962	SHORT	SHORT	USED	SHORT
⚠ R861	3.3	33	22	27
⚠ R865	——	SHORT	SHORT	12

SM

PARTS LIST

Contents

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Printed Circuit Board Ass'y and Parts List 2- 7
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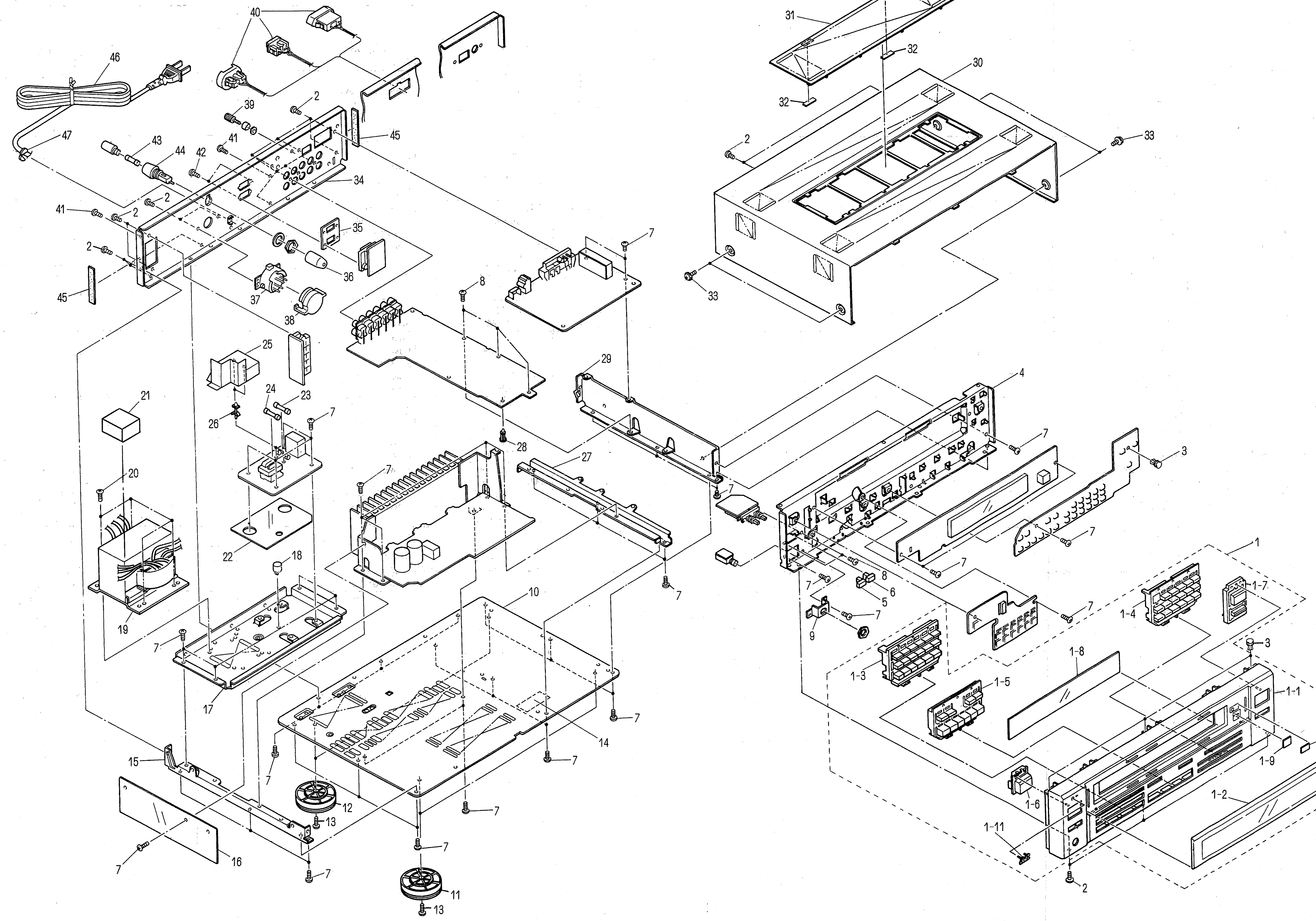
- ■ENA-095 ☐ Tuner PC Board Ass'y 2-16
- ■ENC-072 A Front Switch PC Board Ass'y 2-19

Accessories List 2-20
Packing Materials and Part Numbers 2-21

General Exploded View and Parts List


40
46
31
32
30
39
2
45
47
43
44
42
41
33
34
41
2
2
35
7
2
36
8
33
45
37
38
25
29
21
24
23
4
26
7
28
7
3
27
20
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■ Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RX503BKU	Front Panel Ass'y	1		A, C, G, J, U
		EFP-RX503LBKE	Front Panel Ass'y	1		LBS, LE, LEF
	1-1	E12226-002	Front Panel	1		A, C, G, J, U
		E12226-003	Front Panel	1		LBS, LE, LEF
	1-2	E26210-008	Window Screen	1		A, C, G, J, U
		E26210-009	Window Screen	1		LBS, LE, LEF
	1-3	E26212-001	Preset Button	1		
	1-4	E26212-002	Preset Button	1		
	1-5	E26213-002	Source Button	1		
	1-6	E305741-001	Power Button	1		
	1-7	E305742-001	Volume Button	1		
	1-8	E306679-005	FL Screen	1		
	1-9	E72436-006	Screen	1		
	1-10	E72437-006	Sheet	1		
	1-11	E72968-001	JVC Mark	1		
	2	SBSG3008M	Screw	20		Except U
		SBSG3008M	Screw	22		U
	3	E48729-008	Plastic Rivet	4		
	4	E12228-003	Front Bracket	1		
	5	E75073-001	Push Button	1	Left	
	6	E75073-002	Push Button	1	Right	
	7	SBSG3008CC	Screw	43		
	8	SBST3006CC	Screw	2		
	9	E75143-001	Headphone Bracket	1		
	10	E11424-004	Bottom Plate	1		
	11	E75088-001	Foot	2	Front	
	12	E75088-002	Foot	2	Rear	
	13	SBST3008Z	Screw	4	Foot	
	14	E70281-001	Caution Label	1		J
		E70115-002	Caution Label	1		A, G, LE, LBS, LEF
	15	E304583-002	Side Bracket	1	Left	
	16	E73937-001	Plastic Sheet	1		
	17	E25572-002	Trans Bracket	1		
	18	E49383-002	Fastener	1		
⚠	19	ETP1200-45JA	Power Transformer	1		C, J
⚠		ETP1200-45FA	Power Transformer	1		U
⚠		ETP1200-45EA	Power Transformer	1		A, LE, LEF
⚠		ETP1200-45XA	Power Transformer	1		G
⚠		ETP1200-45EABS	Power Transformer	1		LBS
	20	E65389-004	Screw	4		
	21	E3400-446	Spacer	1		
	22	E75890-001	Protect Sheet	1		A, G, LBS, LE, LEF, U
⚠	23	QMF51U1-5R0S	Fuse	1		C, J
⚠		QMF51E2-2R0	Fuse	1		A, G, LBS, LE, LEF, U
⚠		QMF51E2-2R5BS	Fuse	1		LBS
⚠	24	QMF51E2-R10	Fuse	1		A, G, LE, LEF, U
⚠		QMF51E2-R10BS	Fuse	1		LBS
	25	E306771-001	Primary Cover	1		A, G, LE, LEF, U
	26	E302321-001	Fastener	2		A, G, LE, LEF, U
	27	E305746-002	Center Bracket	1		

⚠ : Safety Parts

The Marks for Designated Areas

A .... Australia   C .... Canada
G .... West Germany   J .... the U.S.A.
LBS .... the U.K. (with LW)   LE .... Europe (with LW)
LEF .... Europe   U .... Other Countries
No mark indicates all areas.

■ Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	28	E306377-001	Fastener	1		
	29	E305745-001	Side Bracket	1	Right	
	30	E25834-003	Metal Cover	1		A, C, G, J
		E26676-001	Metal Cover	1		LBS, LE, LEF, U
	31	E23862-005	Grill	1		LBS, LE, LEF, U
	32	EXO025004H05S11	Felt Spacer	2		LBS, LE, LEF, U
	33	E61660-004	Special Screw	4		
	34	E26214-037	Rear Panel	1		C, J
		E26214-038	Rear Panel	1		U
		E26214-019	Rear Panel	1		A, LBS
		E26214-020	Rear Panel	1		G
		E26214-021	Rear Panel	1		LE, LEF
	—	E306019-062	Rating Label	1		U
		E306019-063	Rating Label	1		A
	35	E69589-008	Spacer	1		J
⚠	36	E69291-001	Fuse Cover	1		LE, LEF, U
	37	QRS0085-018	Volume Selector	1		U
	38	E302764-001	Volume Selector Cover	1		U
	39	E70078-001	GND Terminal	1		
⚠	40	EMC0233-001	AC Outlet	1		A
⚠		EMC0236-001	AC Socket	1		G, LE, LEF
⚠		EMC0237-001BS	AC Outlet	1		LBS
	41	SBST3006M	Screw	2		G
		SBST3006M	Screw	1		Except G
	42	SDSG3008M	Screw	2		C, J, U
⚠	43	QMF51E2-2R1	Fuse	1		U
⚠		QMF51E2-1R25	Fuse	1		LE, LEF
⚠	44	QMG0301-003	Fuse Holder	1		LE, LEF, U
	45	EXO085010R10S	Spacer	2		
	—	E67199-001	Caution Label	1		J
		E65507-001	Caution Label	1		C
⚠	46	QMP1480-200	Power Cord	1		C. J
⚠		QMP7520-200	Power Cord	1		U
⚠		QMP2560-244	Power Cord	1		A
⚠		QMP39A0-200	Power Cord	1		G
⚠		QMP3900-200	Power Cord	1		LE, LEF
⚠		QMP9017-008BS	Power Cord	1		LBS
⚠	47	QHS3876-0162	Cord Stopper	1		Except LBS
⚠		QHS3876-162BS	Cord Stopper	1		LBS
	—	E60965-001BS	Warning Label	1		LBS
		QZL1001-001	UL Label	1		J
		E45858-002	CSA Label	1		C
		E74792-048	FTZ Label	1		G
		E70028-001	Approval Label	1		LE
		E61029-005	Number Label	1		C, G, J, LBS, U
		E75139-001	Name Sheet	1		J, LBS, LE, LEF
		E72430-002	Label	1		

⚠ : Safety Parts

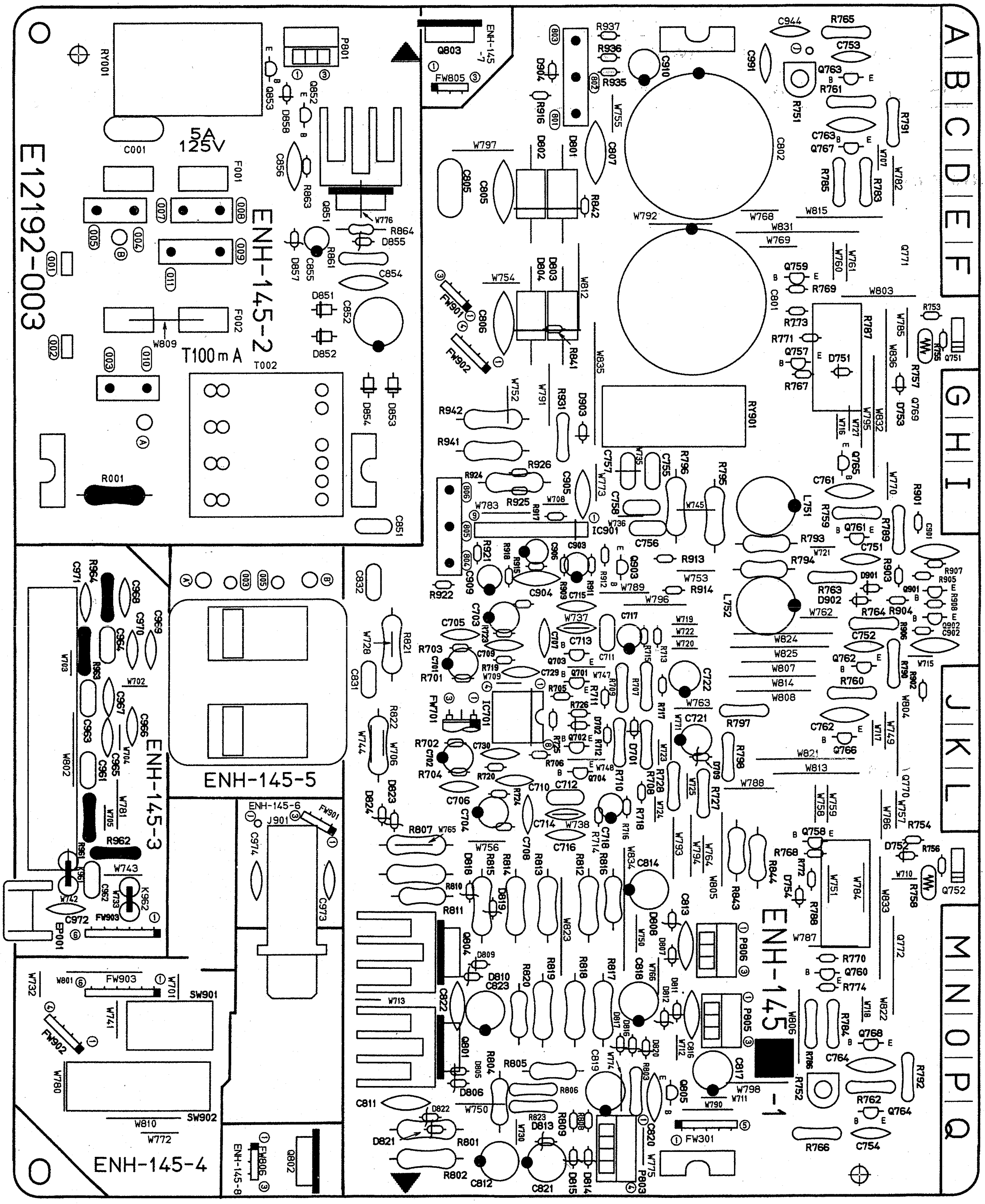
The Marks for Designated Areas

A .... Australia   C .... Canada
G .... West Germany   J .... the U.S.A.
LBS .... the U.K. (with LW)   LE .... Europe (with LW)
LEF .... Europe   U .... Other Countries
No mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ ENH-145☐ Power Amplifier PC Board Ass'y

Note : ENH-145☐ Varies according to the areas employed. See note (1) when placing an order.


E12192-003
ENH-145-2
ENH-145-3
ENH-145-4
ENH-145-5
ENH-145-6
ENH-145-7
ENH-145-8
ENH-145
-1
5A
125V
T100m A
F001
F002
RY001
RY901
IC901
IC701
SW901
SW902
A
B
C
D
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P
Q

Note (1)

PC Board Ass'y	Designated Areas
ENH-145 G	the U. S. A.
ENH-145 H	Canada
ENH-145 I	Other Countries
ENH-145 J	Australia , Europe
ENH-145 K BS	the U. K. (with LW)
ENH-145 L	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q701	2SC2389(S,E)	SILICON	ROHM	
	Q702	2SC2339(S,E)	SILICON	ROHM	
	Q703	2SA1038(R,S)	SILICON	ROHM	
	Q704	2SA1038(R,S)	SILICON	ROHM	
	Q751	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q752	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q757	2SC945A(P,Q)	SILICON	NEC	
	Q758	2SC945A(P,Q)	SILICON	NEC	
	Q759	2SA733A(P,Q)	SILICON	NEC	
	Q760	2SA733A(P,Q)	SILICON	NEC	
	Q761	2SC2389(S)	SILICON	ROHM	
	Q762	2SC2389(S)	SILICON	ROHM	
	Q763	2SA1038(S)	SILICON	ROHM	
	Q764	2SA1038(S)	SILICON	ROHM	
	Q765	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q766	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q767	2SA965(O,Y)	SILICON	TOSHIBA	
	Q768	2SA965(O,Y)	SILICON	TOSHIBA	
	Q769	2SC3854LC(O,Y)	SILICON	SANKEN	
	Q770	2SC3854LC(O,Y)	SILICON	SANKEN	
	Q771	2SA1490LC(O,Y)	SILICON	SANKEN	
	Q772	2SA1490LC(O,Y)	SILICON	SANKEN	
	Q801	2SB1187(E,F)	SILICON	ROHM	
	Q802	2SD2061(E,F)	SILICON	ROHM	
	Q803	2SD2061(E,F)	SILICON	ROHM	
	Q804	2SD2061(E,F)	SILICON	ROHM	
	Q805	2SA965(O,Y)	SILICON	TOSHIBA	
	Q851	2SD1265A(O)	SILICON	MATSUSHITA	I
	Q852	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q853	DTC143TS	SILICON	ROHM	
	Q901	2SC1775AV(E,F)	SILICON	HITACHI	
	Q902	2SC1775AV(E,F)	SILICON	HITACHI	
	Q903	2SA872AV(E,F)	SILICON	HITACHI	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC701	NJM4560DD	I.C.	DAINICHI	
	IC901	TA7317P	I.C.	TOSHIBA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D709	MTZ3.0JB	ZENER	ROHM	
	D751	1SS133	SILICON	ROHM	
	D752	1SS133	SILICON	ROHM	
	D753	1SS133	SILICON	ROHM	
	D754	1SS133	SILICON	ROHM	
	D801	30DF2SFC	SILICON	NIHONINTER	L
	D801	30D2FC	SILICON	NIHONINTER	G
	D801	30D2FC	SILICON	NIHONINTER	H
	D801	30D2FC	SILICON	NIHONINTER	I
	D801	30D2FC	SILICON	NIHONINTER	J
	D801	30D2FC	SILICON	NIHONINTER	KBS
	D802	30DF2SFC	SILICON	NIHONINTER	L
	D802	30D2FC	SILICON	NIHONINTER	G
	D802	30D2FC	SILICON	NIHONINTER	H
	D802	30D2FC	SILICON	NIHONINTER	I
	D802	30D2FC	SILICON	NIHONINTER	J
	D802	30D2FC	SILICON	NIHONINTER	KBS
	D803	30DF2SFC	SILICON	NIHONINTER	L
	D803	30D2FC	SILICON	NIHONINTER	G
	D803	30D2FC	SILICON	NIHONINTER	H
	D803	30D2FC	SILICON	NIHONINTER	I
	D803	30D2FC	SILICON	NIHONINTER	J
	D803	30D2FC	SILICON	NIHONINTER	KBS
	D804	30DF2SFC	SILICON	NIHONINTER	L
	D804	30D2FC	SILICON	NIHONINTER	G
	D804	30D2FC	SILICON	NIHONINTER	H
	D804	30D2FC	SILICON	NIHONINTER	I
	D804	30D2FC	SILICON	NIHONINTER	J
	D804	30D2FC	SILICON	NIHONINTER	KBS
	D805	1SS133	SILICON	ROHM	
	D806	MTZ16JC	ZENER	ROHM	
	D807	1SS133	SILICON	ROHM	
	D808	MTZ15JC	ZENER	ROHM	
	D809	1SS133	SILICON	ROHM	
	D810	MTZ16JC	ZENER	ROHM	
	D811	1SS133	SILICON	ROHM	
	D812	MTZ7.5JC	ZENER	ROHM	
	D813	MTZ10JC	ZENER	ROHM	
	D814	MTZ8.2JC	ZENER	ROHM	
	D815	MTZ8.2JC	ZENER	ROHM	
	D816	MTZ16JC	ZENER	ROHM	
	D817	MTZ16JC	ZENER	ROHM	
	D820	1SS133	SILICON	ROHM	
	D821	MTZ12JC	ZENER	ROHM	I
	D821	MTZ12JC	ZENER	ROHM	J
	D821	MTZ12JC	ZENER	ROHM	KBS
	D821	MTZ12JC	ZENER	ROHM	L
	D822	MTZ10JC	ZENER	ROHM	I
	D822	MTZ10JC	ZENER	ROHM	J
	D822	MTZ10JC	ZENER	ROHM	KBS
	D822	MTZ10JC	ZENER	ROHM	L
	D823	MTZ12JC	ZENER	ROHM	I
	D823	MTZ12JC	ZENER	ROHM	J
	D823	MTZ12JC	ZENER	ROHM	KBS
	D823	MTZ12JC	ZENER	ROHM	L
	D824	MTZ12JC	ZENER	ROHM	I
	D824	MTZ12JC	ZENER	ROHM	J
	D824	MTZ12JC	ZENER	ROHM	KBS
	D824	MTZ12JC	ZENER	ROHM	L
⚠	D851	ERA15-02L19	SILICON	KYOUDOU	
⚠	D852	ERA15-02L19	SILICON	KYOUDOU	
⚠	D853	ERA15-02L19	SILICON	KYOUDOU	
⚠	D854	ERA15-02L19	SILICON	KYOUDOU	
	D855	MTZ12JC	ZENER	ROHM	I
	D857	MTZ6.2JC	ZENER	ROHM	
	D858	1SS133	SILICON	ROHM	
	D901	1SS133	SILICON	ROHM	
	D902	1SS133	SILICON	ROHM	
	D903	1SS133	SILICON	ROHM	
	D904	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	QCZ9019-472	4700PF		CERAMIC	G
	C001	QCZ9019-472	4700PF		CERAMIC	H
	C001	QCZ9019-472	4700PF		CERAMIC	I
	C001	QCZ9019-472	4700PF		CERAMIC	J
	C001	QCZ9019-472	4700PF		CERAMIC	L
	C001	QCZ9019-472BS	4700PF		CERAMIC	KBS
	C701	QETB1HM-106	10MF	50V	ELECTRO	
	C702	QETB1HM-106	10MF	50V	ELECTRO	
	C703	QETB1AM-107	100MF	10V	ELECTRO	
	C704	QETB1AM-107	100MF	10V	ELECTRO	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C705	QCS21HJ-101	100PF	50V	CERAMIC	
	C706	QCS21HJ-101	100PF	50V	CERAMIC	
	C707	QCS21HJ-270	27PF	50V	CERAMIC	
	C708	QCS21HJ-270	27PF	50V	CERAMIC	
	C709	QCS21HJ-120	12PF	50V	CERAMIC	
	C710	QCS21HJ-120	12PF	50V	CERAMIC	
	C711	QFN81HK-103	0.01MF	50V	MYLAR	
	C712	QFN81HK-103	0.01MF	50V	MYLAR	
	C717	QETB1HM-226	22MF	50V	ELECTRO	
	C718	QETB1HM-226	22MF	50V	ELECTRO	
	C721	QETB1EM-476	47MF	25V	ELECTRO	
	C722	QETB1EM-476	47MF	25V	ELECTRO	
	C729	QCS21HJ-220	22PF	50V	CERAMIC	
	C730	QCS21HJ-220	22PF	50V	CERAMIC	
	C751	QCS32HJ-470	47PF	500V	CERAMIC	
	C752	QCS32HJ-470	47PF	500V	CERAMIC	
	C753	QCS32HJ-470	47PF	500V	CERAMIC	
	C754	QCS32HJ-470	47PF	500V	CERAMIC	
	C755	QFN81HK-223	0.022MF	50V	MYLAR	G
	C755	QFN81HK-473	0.047MF	50V	MYLAR	H
	C755	QFN81HK-473	0.047MF	50V	MYLAR	I
	C755	QFN81HK-473	0.047MF	50V	MYLAR	J
	C755	QFN81HK-473	0.047MF	50V	MYLAR	KBS
	C755	QFN81HK-473	0.047MF	50V	MYLAR	L
	C756	QFN81HK-223	0.022MF	50V	MYLAR	G
	C756	QFN81HK-473	0.047MF	50V	MYLAR	H
	C756	QFN81HK-473	0.047MF	50V	MYLAR	I
	C756	QFN81HK-473	0.047MF	50V	MYLAR	J
	C756	QFN81HK-473	0.047MF	50V	MYLAR	KBS
	C756	QFN81HK-473	0.047MF	50V	MYLAR	L
	C757	QFN81HK-473	0.047MF	50V	MYLAR	H
	C757	QFN81HK-473	0.047MF	50V	MYLAR	I
	C757	QFN81HK-473	0.047MF	50V	MYLAR	J
	C757	QFN81HK-473	0.047MF	50V	MYLAR	KBS
	C757	QFN81HK-473	0.047MF	50V	MYLAR	L
	C758	QFN81HK-473	0.047MF	50V	MYLAR	H
	C758	QFN81HK-473	0.047MF	50V	MYLAR	I
	C758	QFN81HK-473	0.047MF	50V	MYLAR	J
	C758	QFN81HK-473	0.047MF	50V	MYLAR	KBS
	C758	QFN81HK-473	0.047MF	50V	MYLAR	L
	C761	QCF21HP-473	0.047MF	50V	CERAMIC	
	C762	QCF21HP-473	0.047MF	50V	CERAMIC	
	C763	QCF21HP-473	0.047MF	50V	CERAMIC	
	C764	QCF21HP-473	0.047MF	50V	CERAMIC	
	C801	EEW5608-878E	8700MF	56V	ELECTRO	I
	C801	EEW5608-878E	8700MF	56V	ELECTRO	J
	C801	EEW5608-878E	8700MF	56V	ELECTRO	KBS
	C801	EEW5608-878E	8700MF	56V	ELECTRO	L
	C801	EEW6310-878T	8700MF	63V	ELECTRO	G
	C801	EEW6310-878T	8700MF	63V	ELECTRO	H
	C802	EEW5608-878E	8700MF	56V	ELECTRO	I
	C802	EEW5608-878E	8700MF	56V	ELECTRO	J
	C802	EEW5608-878E	8700MF	56V	ELECTRO	KBS
	C802	EEW5608-878E	8700MF	56V	ELECTRO	L
	C802	EEW6310-878T	8700MF	63V	ELECTRO	G
	C802	EEW6310-878T	8700MF	63V	ELECTRO	H
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	G
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	H
	C805	QFN82CK-104	0.1MF	160V	MYLAR	I
	C805	QFN82CK-104	0.1MF	160V	MYLAR	J
	C805	QFN82CK-104	0.1MF	160V	MYLAR	KBS
	C805	QFN82CK-104	0.1MF	160V	MYLAR	L
	C806	QCE22HP-103	0.01MF	500V	CERAMIC	
	C807	QCE22HP-103	0.01MF	500V	CERAMIC	
	C811	QCF21HP-472	4700PF	50V	CERAMIC	
	C812	QETB1EM-107	100MF	25V	ELECTRO	
	C813	QCF21HP-472	4700PF	50V	CERAMIC	
	C814	QETB1EM-107	100MF	25V	ELECTRO	G
	C814	QETB1VM-107	100MF	35V	ELECTRO	H
	C814	QETB1VM-107	100MF	35V	ELECTRO	I
	C814	QETB1VM-107	100MF	35V	ELECTRO	J
	C814	QETB1VM-107	100MF	35V	ELECTRO	KBS
	C814	QETB1VM-107	100MF	35V	ELECTRO	L
	C816	QCF21HP-472	4700PF	50V	CERAMIC	
	C817	QETB1EM-107	100MF	25V	ELECTRO	
	C818	QETB1HM-476	47MF	50V	ELECTRO	
	C819	QETB1HM-107	100MF	50V	ELECTRO	
	C820	QCF21HP-472	4700PF	50V	CERAMIC	
	C821	QETB1EM-107	100MF	25V	ELECTRO	
	C822	QCF21HP-472	4700PF	50V	CERAMIC	
	C823	QETB1EM-107	100MF	25V	ELECTRO	
	C831	QFN81HK-223	0.022MF	50V	MYLAR	G
	C831	QFN81HK-223	0.022MF	50V	MYLAR	L
	C832	QFN81HK-223	0.022MF	50V	MYLAR	G
	C832	QFN81HK-223	0.022MF	50V	MYLAR	L
	C851	QFN32AK-223	0.022MF	100V	MYLAR	
	C852	QETB1EM-477	470MF	25V	ELECTRO	G
	C852	QETB1EM-477	470MF	25V	ELECTRO	H
	C852	QETB1EM-477	470MF	25V	ELECTRO	J
	C852	QETB1EM-477	470MF	25V	ELECTRO	KBS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C852	QETB1EM-477	470MF	25V	ELECTRO	L
	C852	QETB1JM-227	220MF	63V	ELECTRO	I
	C854	QCF21HP-472	4700PF	50V	CERAMIC	I
	C855	QETB1CM-476	47MF	16V	ELECTRO	
	C856	QCF21HP-472	4700PF	50V	CERAMIC	
	C901	QCF21HP-223	0.022MF	50V	CERAMIC	
	C902	QCF21HP-223	0.022MF	50V	CERAMIC	
	C903	QETB1HM-226	22MF	50V	ELECTRO	
	C904	QFN81HK-223	0.022MF	50V	MYLAR	
	C905	QCY21HK-102	1000PF	50V	CERAMIC	
	C906	QETB1AM-476	47MF	10V	ELECTRO	
	C909	QETB1CM-226	22MF	16V	ELECTRO	
	C910	QETB1HM-225	2.2MF	50V	ELECTRO	
	C944	QCF21HP-223	0.022MF	50V	CERAMIC	L
	C961	QFN81HK-473	0.047MF	50V	MYLAR	L
	C962	QFN81HK-473	0.047MF	50V	MYLAR	L
	C963	QFN81HK-473	0.047MF	50V	MYLAR	L
	C964	QFN81HK-473	0.047MF	50V	MYLAR	L
	C965	QCS21HJ-331	330PF	50V	CERAMIC	L
	C966	QCS21HJ-331	330PF	50V	CERAMIC	L
	C967	QCS21HJ-331	330PF	50V	CERAMIC	L
	C968	QCS21HJ-331	330PF	50V	CERAMIC	L
	C969	QCS21HJ-471	470PF	50V	CERAMIC	L
	C970	QCS21HJ-471	470PF	50V	CERAMIC	L
	C971	QCS21HJ-471	470PF	50V	CERAMIC	L
	C972	QCS21HJ-471	470PF	50V	CERAMIC	L
	C973	QCS21HJ-101	100PF	50V	CERAMIC	L
	C974	QCS21HJ-101	100PF	50V	CERAMIC	L
	C991	QCS21HJ-331	330PF	50V	CERAMIC	L

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	G
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	H
	R701	QRD167J-222	2.2K	1/6W	CARBON	
	R702	QRD167J-222	2.2K	1/6W	CARBON	
	R703	QRD167J-104	100K	1/6W	CARBON	
	R704	QRD167J-104	100K	1/6W	CARBON	
	R705	QRD167J-472	4.7K	1/6W	CARBON	
	R706	QRD167J-472	4.7K	1/6W	CARBON	
⚠	R707	QRD14CJ-820S	82	1/4W	UNF.CARBON	
⚠	R708	QRD14CJ-820S	82	1/4W	UNF.CARBON	
⚠	R709	QRD14CJ-820S	82	1/4W	UNF.CARBON	
⚠	R710	QRD14CJ-820S	82	1/4W	UNF.CARBON	
	R711	QRD167J-470	47	1/6W	CARBON	
	R712	QRD167J-470	47	1/6W	CARBON	
	R713	QRD167J-153	15K	1/6W	CARBON	
	R714	QRD167J-153	15K	1/6W	CARBON	
	R715	QRD167J-153	15K	1/6W	CARBON	
	R716	QRD167J-153	15K	1/6W	CARBON	
	R717	QRD167J-332	3.3K	1/6W	CARBON	
	R718	QRD167J-332	3.3K	1/6W	CARBON	
	R719	QRD167J-104	100K	1/6W	CARBON	G
	R719	QRD167J-104	100K	1/6W	CARBON	H
⚠	R719	QRV144F-1003	100K	1/4W	M.FILM	I
⚠	R719	QRV144F-1003	100K	1/4W	M.FILM	J
⚠	R719	QRV144F-1003	100K	1/4W	M.FILM	KBS
⚠	R719	QRV144F-1003	100K	1/4W	M.FILM	L
	R720	QRD167J-104	100K	1/6W	CARBON	G
	R720	QRD167J-104	100K	1/6W	CARBON	H
⚠	R720	QRV144F-1003	100K	1/4W	M.FILM	I
⚠	R720	QRV144F-1003	100K	1/4W	M.FILM	J
⚠	R720	QRV144F-1003	100K	1/4W	M.FILM	KBS
⚠	R720	QRV144F-1003	100K	1/4W	M.FILM	L
	R723	QRD167J-132	1.3K	1/6W	CARBON	G
	R723	QRD167J-132	1.3K	1/6W	CARBON	H
⚠	R723	QRV144F-1301	1.3K	1/4W	M.FILM	I
⚠	R723	QRV144F-1301	1.3K	1/4W	M.FILM	J
⚠	R723	QRV144F-1301	1.3K	1/4W	M.FILM	KBS
⚠	R723	QRV144F-1301	1.3K	1/4W	M.FILM	L
	R724	QRD167J-132	1.3K	1/6W	CARBON	G
	R724	QRD167J-132	1.3K	1/6W	CARBON	H
⚠	R724	QRV144F-1301	1.3K	1/4W	M.FILM	I
⚠	R724	QRV144F-1301	1.3K	1/4W	M.FILM	J
⚠	R724	QRV144F-1301	1.3K	1/4W	M.FILM	KBS
⚠	R724	QRV144F-1301	1.3K	1/4W	M.FILM	L
	R725	QRD167J-202	2K	1/6W	CARBON	
	R726	QRD167J-223	22K	1/6W	CARBON	I
	R726	QRD167J-223	22K	1/6W	CARBON	J
	R726	QRD167J-223	22K	1/6W	CARBON	KBS
	R726	QRD167J-223	22K	1/6W	CARBON	L
	R726	QRD167J-273	27K	1/6W	CARBON	G

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R726	QRD167J-273	27K	1/6W	CARBON	H
⚠	R727	QRD14CJ-102S	1K	1/4W	UNF.CARBON	
	R728	QRD167J-102	1K	1/6W	CARBON	
	R751	QVPE601-501	500	0.15W	VARIABLE	
	R752	QVPE601-501	500	0.15W	VARIABLE	
	R753	QRD167J-152	1.5K	1/6W	CARBON	
	R754	QRD167J-152	1.5K	1/6W	CARBON	
	R755	QRD167J-391	390	1/6W	CARBON	
	R756	QRD167J-391	390	1/6W	CARBON	
	R757	SDT250			THERMISTER	I
	R757	SDT250			THERMISTER	J
	R757	SDT250			THERMISTER	KBS
	R757	SDT250			THERMISTER	L
	R758	SDT250			THERMISTER	I
	R758	SDT250			THERMISTER	J
	R758	SDT250			THERMISTER	KBS
	R758	SDT250			THERMISTER	L
⚠	R759	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R760	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R761	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R762	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R763	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R764	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R765	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R766	QRD14CJ-100S	10	1/4W	UNF.CARBON	
	R767	QRD167J-820	82	1/6W	CARBON	
	R768	QRD167J-820	82	1/6W	CARBON	
	R769	QRD167J-820	82	1/6W	CARBON	
	R770	QRD167J-820	82	1/6W	CARBON	
	R771	QRD167J-151	150	1/6W	CARBON	
	R772	QRD167J-151	150	1/6W	CARBON	
	R773	QRD167J-151	150	1/6W	CARBON	
	R774	QRD167J-151	150	1/6W	CARBON	
⚠	R783	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R784	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R785	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R786	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R787	ERF032K-R22	0.22	3W	CEMENT	
⚠	R788	ERF032K-R22	0.22	3W	CEMENT	
⚠	R789	QRD14CJ-100S	10	1/4W	UNF.CARBON	G
⚠	R789	QRD14CJ-100S	10	1/4W	UNF.CARBON	H
⚠	R789	QRZ0077-100	10	1/4W	FUSIBLE	I
⚠	R789	QRZ0077-100	10	1/4W	FUSIBLE	J
⚠	R789	QRZ0077-100	10	1/4W	FUSIBLE	KBS
⚠	R789	QRZ0077-100	10	1/4W	FUSIBLE	L
⚠	R790	QRD14CJ-100S	10	1/4W	UNF.CARBON	G
⚠	R790	QRD14CJ-100S	10	1/4W	UNF.CARBON	H
⚠	R790	QRZ0077-100	10	1/4W	FUSIBLE	I
⚠	R790	QRZ0077-100	10	1/4W	FUSIBLE	J
⚠	R790	QRZ0077-100	10	1/4W	FUSIBLE	KBS
⚠	R790	QRZ0077-100	10	1/4W	FUSIBLE	L
⚠	R791	QRD14CJ-100S	10	1/4W	UNF.CARBON	G
⚠	R791	QRD14CJ-100S	10	1/4W	UNF.CARBON	H
⚠	R791	QRZ0077-100	10	1/4W	FUSIBLE	I
⚠	R791	QRZ0077-100	10	1/4W	FUSIBLE	J
⚠	R791	QRZ0077-100	10	1/4W	FUSIBLE	KBS
⚠	R791	QRZ0077-100	10	1/4W	FUSIBLE	L
⚠	R792	QRD14CJ-100S	10	1/4W	UNF.CARBON	G
⚠	R792	QRD14CJ-100S	10	1/4W	UNF.CARBON	H
⚠	R792	QRZ0077-100	10	1/4W	FUSIBLE	I
⚠	R792	QRZ0077-100	10	1/4W	FUSIBLE	J
⚠	R792	QRZ0077-100	10	1/4W	FUSIBLE	KBS
⚠	R792	QRZ0077-100	10	1/4W	FUSIBLE	L
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R795	QRG022J-100A	10	2W	O.M.FILM	
⚠	R796	QRG022J-100A	10	2W	O.M.FILM	
⚠	R797	QRD14CJ-330S	33	1/4W	UNF.CARBON	G
⚠	R797	QRD14CJ-330S	33	1/4W	UNF.CARBON	H
⚠	R797	QRZ0077-330	33	1/4W	FUSIBLE	I
⚠	R797	QRZ0077-330	33	1/4W	FUSIBLE	J
⚠	R797	QRZ0077-330	33	1/4W	FUSIBLE	KBS
⚠	R797	QRZ0077-330	33	1/4W	FUSIBLE	L
⚠	R798	QRD14CJ-330S	33	1/4W	UNF.CARBON	G
⚠	R798	QRD14CJ-330S	33	1/4W	UNF.CARBON	H
⚠	R798	QRZ0077-330	33	1/4W	FUSIBLE	I
⚠	R798	QRZ0077-330	33	1/4W	FUSIBLE	J
⚠	R798	QRZ0077-330	33	1/4W	FUSIBLE	KBS
⚠	R798	QRZ0077-330	33	1/4W	FUSIBLE	L
⚠	R801	QRG022J-561A	560	2W	O.M.FILM	
⚠	R802	QRG022J-561A	560	2W	O.M.FILM	
⚠	R803	QRD14CJ-220S	22	1/4W	UNF.CARBON	G
⚠	R803	QRD14CJ-220S	22	1/4W	UNF.CARBON	H
⚠	R803	QRZ0077-220	22	1/4W	FUSIBLE	I
⚠	R803	QRZ0077-220	22	1/4W	FUSIBLE	J
⚠	R803	QRZ0077-220	22	1/4W	FUSIBLE	KBS
⚠	R803	QRZ0077-220	22	1/4W	FUSIBLE	L
⚠	R804	QRD125J-562	5.6K	1/2W	UNF.CARBON	
⚠	R805	QRD125J-272	2.7K	1/2W	UNF.CARBON	
⚠	R806	QRD14CJ-121S	120	1/4W	UNF.CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R807	QRG022J-561A	560	2W	O.M.FILM	
	R808	QRD167J-220	22	1/6W	CARBON	
	R809	QRD167J-220	22	1/6W	CARBON	
⚠	R810	QRG022J-561A	560	2W	O.M.FILM	
⚠	R811	QRD125J-562	5.6K	1/2W	UNF.CARBON	
⚠	R812	QRG022J-391A	390	2W	O.M.FILM	H
⚠	R812	QRG022J-391A	390	2W	O.M.FILM	I
⚠	R812	QRG022J-391A	390	2W	O.M.FILM	J
⚠	R812	QRG022J-391A	390	2W	O.M.FILM	KBS
⚠	R812	QRG022J-391A	390	2W	O.M.FILM	L
⚠	R812	QRG022J-561A	560	2W	O.M.FILM	G
⚠	R813	QRG022J-391A	390	2W	O.M.FILM	H
⚠	R813	QRG022J-391A	390	2W	O.M.FILM	I
⚠	R813	QRG022J-391A	390	2W	O.M.FILM	J
⚠	R813	QRG022J-391A	390	2W	O.M.FILM	KBS
⚠	R813	QRG022J-391A	390	2W	O.M.FILM	L
⚠	R813	QRG022J-561A	560	2W	O.M.FILM	G
⚠	R814	QRG022J-391A	390	2W	O.M.FILM	H
⚠	R814	QRG022J-391A	390	2W	O.M.FILM	I
⚠	R814	QRG022J-391A	390	2W	O.M.FILM	J
⚠	R814	QRG022J-391A	390	2W	O.M.FILM	KBS
⚠	R814	QRG022J-391A	390	2W	O.M.FILM	L
⚠	R814	QRG022J-561A	560	2W	O.M.FILM	G
⚠	R816	QRD125J-562	5.6K	1/2W	UNF.CARBON	
⚠	R817	QRG022J-471A	470	2W	O.M.FILM	G
⚠	R817	QRG026J-102AF	1K	2W	O.M.FILM	H
⚠	R817	QRG026J-102AF	1K	2W	O.M.FILM	I
⚠	R817	QRG026J-102AF	1K	2W	O.M.FILM	J
⚠	R817	QRG026J-102AF	1K	2W	O.M.FILM	KBS
⚠	R817	QRG026J-102AF	1K	2W	O.M.FILM	L
⚠	R818	QRG022J-471A	470	2W	O.M.FILM	G
⚠	R818	QRG026J-102AF	1K	2W	O.M.FILM	H
⚠	R818	QRG026J-102AF	1K	2W	O.M.FILM	I
⚠	R818	QRG026J-102AF	1K	2W	O.M.FILM	J
⚠	R818	QRG026J-102AF	1K	2W	O.M.FILM	KBS
⚠	R818	QRG026J-102AF	1K	2W	O.M.FILM	L
⚠	R819	QRG026J-102AF	1K	2W	O.M.FILM	H
⚠	R819	QRG026J-102AF	1K	2W	O.M.FILM	I
⚠	R819	QRG026J-102AF	1K	2W	O.M.FILM	J
⚠	R819	QRG026J-102AF	1K	2W	O.M.FILM	KBS
⚠	R819	QRG026J-102AF	1K	2W	O.M.FILM	L
⚠	R820	QRD125J-822	8.2K	1/2W	UNF.CARBON	
⚠	R821	QRX022J-R22A	0.22	2W	M.FILM	G
⚠	R822	QRX022J-R22A	0.22	2W	M.FILM	G
	R841	QRD167J-104	100K	1/6W	CARBON	
	R842	QRD167J-104	100K	1/6W	CARBON	
⚠	R843	QRD125J-2R2	2.2	1/2W	UNF.CARBON	
⚠	R844	QRD125J-2R2	2.2	1/2W	UNF.CARBON	
⚠	R861	QRD14CJ-100S	10	1/4W	UNF.CARBON	G
⚠	R861	QRD14CJ-100S	10	1/4W	UNF.CARBON	H
⚠	R861	QRZ0076-3R3	3.3	1/4W	FUSIBLE	I
⚠	R861	QRZ0077-220	22	1/4W	FUSIBLE	L
⚠	R861	QRZ0077-270	27	1/4W	FUSIBLE	KBS
⚠	R861	QRZ0077-330	33	1/4W	FUSIBLE	J
	R863	QRD167J-821	820	1/6W	CARBON	
⚠	R864	QRG012J-272A	2.7K	1W	O.M.FILM	I
	R865	QRD167J-120	12	1/6W	CARBON	KBS
	R901	QRD167J-681	680	1/6W	CARBON	
	R902	QRD167J-681	680	1/6W	CARBON	
	R903	QRD167J-562	5.6K	1/6W	CARBON	
	R904	QRD167J-562	5.6K	1/6W	CARBON	
	R905	QRD167J-123	12K	1/6W	CARBON	
	R906	QRD167J-123	12K	1/6W	CARBON	
	R907	QRD167J-152	1.5K	1/6W	CARBON	
	R908	QRD167J-152	1.5K	1/6W	CARBON	
	R909	QRD167J-103	10K	1/6W	CARBON	
	R911	QRD167J-332	3.3K	1/6W	CARBON	
	R912	QRD167J-473	47K	1/6W	CARBON	
	R913	QRD167J-104	100K	1/6W	CARBON	
	R914	QRD167J-823	82K	1/6W	CARBON	
	R915	QRD167J-473	47K	1/6W	CARBON	
	R916	QRD167J-563	56K	1/6W	CARBON	
	R917	QRD167J-683	68K	1/6W	CARBON	
	R918	QRD167J-392	3.9K	1/6W	CARBON	
	R921	QRD167J-224	220K	1/6W	CARBON	
	R922	QRD167J-182	1.8K	1/6W	CARBON	
⚠	R924	QRG022J-122A	1.2K	2W	O.M.FILM	I
⚠	R924	QRG022J-122A	1.2K	2W	O.M.FILM	J
⚠	R924	QRG022J-122A	1.2K	2W	O.M.FILM	KBS
⚠	R924	QRG022J-122A	1.2K	2W	O.M.FILM	L
⚠	R924	QRG022J-152A	1.5K	2W	O.M.FILM	G
⚠	R924	QRG022J-152A	1.5K	2W	O.M.FILM	H
	R925	QRD167J-121	120	1/6W	CARBON	
	R926	QRD167J-121	120	1/6W	CARBON	G
	R926	QRD167J-121	120	1/6W	CARBON	H
⚠	R931	QRD14CJ-330S	33	1/4W	UNF.CARBON	
	R935	QRD167J-562	5.6K	1/6W	CARBON	
	R936	QRD167J-822	8.2K	1/6W	CARBON	
	R937	QRD167J-103	10K	1/6W	CARBON	
⚠	R941	QRG022J-471A	470	2W	O.M.FILM	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R942	QRG022J-471A	470	2W	O.M.FILM	
⚠	R961	QRZ0077-100	10	1/4W	FUSIBLE	L
⚠	R962	QRZ0077-100	10	1/4W	FUSIBLE	L
⚠	R963	QRZ0077-100	10	1/4W	FUSIBLE	L
⚠	R964	QRZ0077-100	10	1/4W	FUSIBLE	L

⚠ : SAFETY PARTS

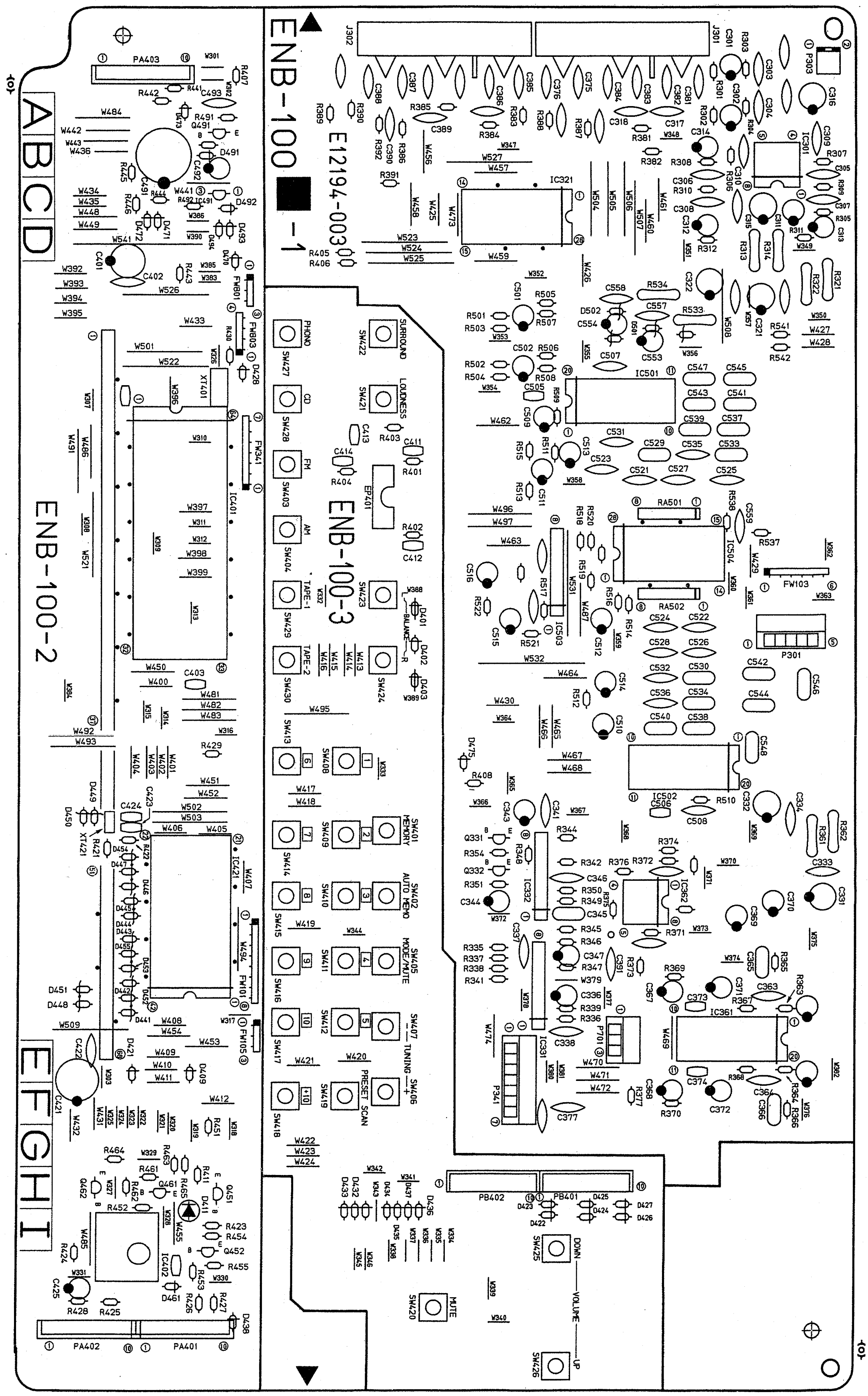
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB90TV-801A	SPEAKER TERMINAL	
		EMG7331-001	FUSE CLIP	
⚠		ETP1000-41EA	POWER TRANSFORMER	J
⚠		ETP1000-41EA	POWER TRANSFORMER	L
⚠		ETP1000-41EABS	POWER TRANSFORMER	KBS
⚠		ETP1000-41JA	POWER TRANSFORMER	G
⚠		ETP1000-41JA	POWER TRANSFORMER	H
⚠		ETP1000-41ZB	POWER TRANSFORMER	I
		E12192-003	CIRCUIT BOARD	G
		E12192-003	CIRCUIT BOARD	H
		E12192-003	CIRCUIT BOARD	I
		E12192-003	CIRCUIT BOARD	J
		E12192-003	CIRCUIT BOARD	L
		E12192-003BS	CIRCUIT BOARD	KBS
		E305747-001	H.S. BRACKET	
		E305748-002	H.S. BRACKET	
		E306674-001	HEAT SINK	
		E65508-002	TAB	
		E65654-001	SPACER	H
		E65654-001	SPACER	I
		E65654-001	SPACER	J
		E65654-001	SPACER	KBS
		E65654-001	SPACER	L
		E67132-T2R0	FUSE LABEL	J
		E67132-T2R0	FUSE LABEL	KBS
		E67132-T2R0	FUSE LABEL	L
		E67764-102	WRAPPING TERMINAL	
		E67764-103	WRAPPING TERMINAL	
		E67764-103	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	
		E70225-002	EARTH PLATE	L
		E70859-001	EARTH PLATE	
		E70859-001	EARTH PLATE	G
		E70859-001	EARTH PLATE	H
		E70945-H25	HEAT SINK	G
		E70945-H25	HEAT SINK	G
		E70945-H25	HEAT SINK	H
		E70945-H25	HEAT SINK	H
		E70945-H40B	HEAT SINK	I
		E73525-003	SCREW	
⚠		QMC0437-002	AC OUTLET	I
⚠		QMC0440-001	AC OUTLET	G
⚠		QMC0440-001	AC OUTLET	H
		SBSB3008CC	SCREW	G
		SBSB3008CC	SCREW	G
		SBSB3008CC	SCREW	H
		SBSB3008CC	SCREW	H
		SBSG3008CC	SCREW	
		SBSG3010CC	SCREW	I
	J901	QMS6A40-021	HEADPHONE JACK	
	K961	ENZ8101-007	INDUCTOR	L
	K962	ENZ8101-007	INDUCTOR	L
	L751	EQL0101-1R2	INDUCTOR	
	L752	EQL0101-1R2	INDUCTOR	
	P801	VMC0107-003	CONNECTOR	
	P803	VMC0107-004	CONNECTOR	
	P805	VMC0107-003	CONNECTOR	
	P806	VMC0107-003	CONNECTOR	
	EP801	E70859-001	EARTH PLATE	
	EP802	E70859-001	EARTH PLATE	L
	FW301	EWR35B-25LST	FLAT WIRE	
	FW701	EWR23C-30JN	FLAT WIRE	
	FW805	EWR33B-20LST	FLAT WIRE	
	FW806	EWR33B-20LST	FLAT WIRE	
	FW901	EWR33B-20SST	FLAT WIRE	
	FW902	EWR34B-25SST	FLAT WIRE	
	FW903	EWR36B-35SST	FLAT WIRE	
	RY001	ESK1D12-113	RELAY	J
	RY001	ESK1D12-115	RELAY	G
	RY001	ESK1D12-115	RELAY	H
	RY001	ESK1D12-115	RELAY	I
	RY001	ESK1D12-115	RELAY	L
	RY001	ESK1D12-115BS	RELAY	KBS
	RY901	ESK5D24-218	RELAY	
	SW901	QST4231-E01	PUSH SWITCH	
	SW902	QST4231-E01	PUSH SWITCH	

⚠ : SAFETY PARTS

■ ENB-100☐ Source Selector and SEA PC Board Ass'y

Note : ENB-100☐ Varies according to the areas employed. See note (1) when placing an order.


ENB-100■-1
E12194-003
ENB-100-2
ENB-100-3
A
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J302
J301
PA403
PA402
PA401
PB402
PB401
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IC421
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IC501
IC502
IC503
IC504
IC331
IC332
IC361
IC362
RA501
RA502
FW103
FW101
FW105
FW341
FW801
FW803
XT401
XT421
EP401
SW427 PHONO
SW422 SURROUND
SW428 CD
SW421 LOUDNESS
SW403 FM
SW404 AM
SW429 TAPE-1
SW423
SW430 TAPE-2
SW424
BALANCE
L
R
SW401 MEMORY
SW402 AUTO MEMO
SW405 MODE/MUTE
SW407 TUNING
SW406 PRESET SCAN
SW420 MUTE
SW425 DOWN
VOLUME
SW426 UP
SW413
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Note (1)

PC Board Ass'y	Designated Areas
ENB-100 A	the U. S. A. , Canada
ENB-100 B	Other Countries
ENB-100 C	Australia
ENB-100 D	Europe the U. K. (with LW)
ENB-100 E	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q331	DTC144ES	SILICON	ROHM	
	Q332	2SD655(D,E)	SILICON	HITACHI	
	Q451	2SC458(C,D)	SILICON	HITACHI	
	Q452	2SC458(C,D)	SILICON	HITACHI	
	Q461	2SC458(C,D)	SILICON	HITACHI	
	Q462	2SC458(C,D)	SILICON	HITACHI	
	Q491	DTC114YS	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC301	VC4580DD	I.C.	DAINICHI	
	IC321	TC9164N	I.C.	TOSHIBA	
	IC331	VC4580L	I.C.	DAINICHI	
	IC332	VC4580L	I.C.	DAINICHI	
	IC361	TC9177P	I.C.	TOSHIBA	
	IC362	NJM4560DD	I.C.	DAINICHI	
	IC401	MN178122JNE	I.C.	MATSUSHITA	
	IC402	GP1U501X	I.C.	SHARP	
	IC421	LC6514B-4131	I.C.	SANYO	
	IC491	MN1281(P,Q)	I.C.	MATSUSHITA	
	IC501	LA3607S	I.C.	SANYO	
	IC502	LA3607S	I.C.	SANYO	
	IC503	VC4580LD	I.C.	DAINICHI	
	IC504	LC7522	I.C.	SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D402	1SS133	SILICON	ROHM	
	D409	1SS133	SILICON	ROHM	
	D411	SLH-34VC50F	L.E.D.	ROHM	
	D421	1SS133	SILICON	ROHM	
	D422	1SS133	SILICON	ROHM	
	D423	1SS133	SILICON	ROHM	
	D424	1SS133	SILICON	ROHM	
	D425	1SS133	SILICON	ROHM	
	D426	1SS133	SILICON	ROHM	
	D427	1SS133	SILICON	ROHM	
	D428	1SS133	SILICON	ROHM	
	D432	1SS133	SILICON	ROHM	
	D433	1SS133	SILICON	ROHM	
	D435	1SS133	SILICON	ROHM	A
	D436	1SS133	SILICON	ROHM	C
	D436	1SS133	SILICON	ROHM	D
	D436	1SS133	SILICON	ROHM	E
	D437	1SS133	SILICON	ROHM	D
	D438	1SS133	SILICON	ROHM	B
	D441	MTZ3.3JB	ZENER	ROHM	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D442	MTZ3.3JB	ZENER	ROHM	
	D443	MTZ3.3JB	ZENER	ROHM	
	D444	MTZ3.3JB	ZENER	ROHM	
	D445	MTZ3.3JB	ZENER	ROHM	
	D446	MTZ3.3JB	ZENER	ROHM	
	D447	MTZ3.3JB	ZENER	ROHM	
	D448	MTZ3.3JB	ZENER	ROHM	
	D449	MTZ3.3JB	ZENER	ROHM	
	D450	MTZ3.3JB	ZENER	ROHM	
	D451	MTZ3.3JB	ZENER	ROHM	
	D452	MTZ3.3JB	ZENER	ROHM	
	D453	MTZ3.3JB	ZENER	ROHM	
	D454	MTZ3.3JB	ZENER	ROHM	
	D455	MTZ3.3JB	ZENER	ROHM	
	D461	1SS133	SILICON	ROHM	
	D470	1SS133	SILICON	ROHM	
	D471	1SS133	SILICON	ROHM	
	D472	1SS133	SILICON	ROHM	
	D473	1SS133	SILICON	ROHM	
	D475	1SS133	SILICON	ROHM	
	D491	1SS133	SILICON	ROHM	
	D492	1SS133	SILICON	ROHM	
	D493	1SS133	SILICON	ROHM	
	D494	1SS133	SILICON	ROHM	
	D501	MTZ6.8JC	ZENER	ROHM	
	D502	MTZ6.8JC	ZENER	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C301	QETB1HM-475	4.7MF	50V	ELECTRO	
	C302	QETB1HM-475	4.7MF	50V	ELECTRO	
	C303	QCS21HJ-101	100PF	50V	CERAMIC	A
	C303	QCS21HJ-101	100PF	50V	CERAMIC	B
	C303	QCS21HJ-101	100PF	50V	CERAMIC	C
	C303	QCS21HJ-101	100PF	50V	CERAMIC	D
	C303	QCS21HJ-471	470PF	50V	CERAMIC	E
	C304	QCS21HJ-101	100PF	50V	CERAMIC	A
	C304	QCS21HJ-101	100PF	50V	CERAMIC	B
	C304	QCS21HJ-101	100PF	50V	CERAMIC	C
	C304	QCS21HJ-101	100PF	50V	CERAMIC	D
	C304	QCS21HJ-471	470PF	50V	CERAMIC	E
	C305	QCY21HK-182	1800PF	50V	CERAMIC	
	C306	QCY21HK-182	1800PF	50V	CERAMIC	
	C307	QCY21HK-682	6800PF	50V	CERAMIC	
	C308	QCY21HK-682	6800PF	50V	CERAMIC	
	C309	QCY21HK-101	100PF	50V	CERAMIC	
	C310	QCY21HK-101	100PF	50V	CERAMIC	
	C311	QETB1HM-475	4.7MF	50V	ELECTRO	
	C312	QETB1HM-475	4.7MF	50V	ELECTRO	
	C313	QETB1AM-107	100MF	10V	ELECTRO	
	C314	QETB1AM-107	100MF	10V	ELECTRO	
	C315	QETB1CM-476	47MF	16V	ELECTRO	
	C316	QETB1CM-476	47MF	16V	ELECTRO	
	C317	QCF21HP-223	0.022MF	50V	CERAMIC	
	C318	QCF21HP-223	0.022MF	50V	CERAMIC	
	C319	QFN81HK-104	0.1MF	50V	MYLAR	
	C321	QETB1EM-476	47MF	25V	ELECTRO	
	C322	QETB1EM-476	47MF	25V	ELECTRO	
	C331	QETB1EM-476	47MF	25V	ELECTRO	
	C332	QETB1EM-476	47MF	25V	ELECTRO	
	C333	QCF21HP-223	0.022MF	50V	CERAMIC	
	C334	QCF21HP-223	0.022MF	50V	CERAMIC	
	C336	QETB1CM-226	22MF	16V	ELECTRO	
	C337	QCS21HJ-101	100PF	50V	CERAMIC	
	C338	QCS21HJ-101	100PF	50V	CERAMIC	
	C341	QCS21HJ-101	100PF	50V	CERAMIC	
	C343	QETB1HM-475	4.7MF	50V	ELECTRO	
	C344	QETB1HM-105	1MF	50V	ELECTRO	
	C345	QFN81HJ-392	3900PF	50V	MYLAR	
	C346	QCS21HJ-100	10PF	50V	CERAMIC	
	C347	QETB1EM-226	22MF	25V	ELECTRO	
	C363	QCS21HJ-181	180PF	50V	CERAMIC	
	C364	QCS21HJ-181	180PF	50V	CERAMIC	
	C365	QFN81HK-333	0.033MF	50V	MYLAR	
	C366	QFN81HK-333	0.033MF	50V	MYLAR	
	C367	QETB1HM-475	4.7MF	50V	ELECTRO	
	C368	QETB1HM-475	4.7MF	50V	ELECTRO	
	C369	QETB1HM-105	1MF	50V	ELECTRO	
	C370	QETB1HM-105	1MF	50V	ELECTRO	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C371	QETB1EM-106	10MF	25V	ELECTRO	
	C372	QETB1EM-106	10MF	25V	ELECTRO	
	C375	QCS21HJ-331	330PF	50V	CERAMIC	E
	C376	QCS21HJ-331	330PF	50V	CERAMIC	E
	C377	QCS21HJ-561	560PF	50V	CERAMIC	
	C381	QCS21HJ-331	330PF	50V	CERAMIC	E
	C382	QCS21HJ-331	330PF	50V	CERAMIC	E
	C383	QCS21HJ-331	330PF	50V	CERAMIC	E
	C384	QCS21HJ-331	330PF	50V	CERAMIC	E
	C385	QCS21HJ-331	330PF	50V	CERAMIC	E
	C386	QCS21HJ-331	330PF	50V	CERAMIC	E
	C387	QCS21HJ-561	560PF	50V	CERAMIC	E
	C388	QCS21HJ-561	560PF	50V	CERAMIC	E
	C389	QCS21HJ-221	220PF	50V	CERAMIC	E
	C390	QCS21HJ-221	220PF	50V	CERAMIC	E
	C401	EET0602-477T	470MF	6.3V	ELECTRO	
	C402	QCZ0205-155	1.5MF	25V	CERAMIC	
	C403	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C411	QCGB1HK-102	1000PF	50V	CERAMIC	
	C412	QCGB1HK-102	1000PF	50V	CERAMIC	
	C413	QCGB1HK-102	1000PF	50V	CERAMIC	
	C414	QCGB1HK-102	1000PF	50V	CERAMIC	
	C421	EEZ0601-108	1000MF	6.3V	ELECTRO	
	C422	QCZ0205-155	1.5MF	25V	CERAMIC	
	C423	QCBB1HK-101	100PF	50V	CERAMIC	
	C424	QCBB1HK-101	100PF	50V	CERAMIC	
	C425	QETB1HM-475	4.7MF	50V	ELECTRO	
	C491	EEZ0502-479	47000MF	5.5V	ELECTRO	
	C492	QETB1HM-225	2.2MF	50V	ELECTRO	
	C493	QCF21HP-223	0.022MF	50V	CERAMIC	
	C501	QETB1HM-475	4.7MF	50V	ELECTRO	
	C502	QETB1HM-475	4.7MF	50V	ELECTRO	
	C507	QCS21HJ-101	100PF	50V	CERAMIC	
	C508	QCS21HJ-101	100PF	50V	CERAMIC	
	C509	QETB1CM-226	22MF	16V	ELECTRO	
	C510	QETB1CM-226	22MF	16V	ELECTRO	
	C511	QETB1HM-475	4.7MF	50V	ELECTRO	
	C512	QETB1HM-475	4.7MF	50V	ELECTRO	
	C513	QETB1HM-475	4.7MF	50V	ELECTRO	
	C514	QETB1HM-475	4.7MF	50V	ELECTRO	
	C515	QETB1CM-226	22MF	16V	ELECTRO	
	C516	QETB1CM-226	22MF	16V	ELECTRO	
	C521	QCY21HK-272	2700PF	50V	CERAMIC	
	C522	QCY21HK-272	2700PF	50V	CERAMIC	
	C523	QCS21HJ-471	470PF	50V	CERAMIC	
	C524	QCS21HJ-471	470PF	50V	CERAMIC	
	C525	QCY21HK-682	6800PF	50V	CERAMIC	
	C526	QCY21HK-682	6800PF	50V	CERAMIC	
	C527	QCY21HK-122	1200PF	50V	CERAMIC	
	C528	QCY21HK-122	1200PF	50V	CERAMIC	
	C529	QFN81HK-183	0.018MF	50V	MYLAR	
	C530	QFN81HK-183	0.018MF	50V	MYLAR	
	C531	QCY21HK-272	2700PF	50V	CERAMIC	
	C532	QCY21HK-272	2700PF	50V	CERAMIC	
	C533	QFN81HK-473	0.047MF	50V	MYLAR	
	C534	QFN81HK-473	0.047MF	50V	MYLAR	
	C535	QCY21HK-682	6800PF	50V	CERAMIC	
	C536	QCY21HK-682	6800PF	50V	CERAMIC	
	C537	QFN81HK-104	0.1MF	50V	MYLAR	
	C538	QFN81HK-104	0.1MF	50V	MYLAR	
	C539	QFN81HK-183	0.018MF	50V	MYLAR	
	C540	QFN81HK-183	0.018MF	50V	MYLAR	
	C541	QFV81HJ-274	0.27MF	50V	T.FILM	
	C542	QFV81HJ-274	0.27MF	50V	T.FILM	
	C543	QFN81HK-473	0.047MF	50V	MYLAR	
	C544	QFN81HK-473	0.047MF	50V	MYLAR	
	C545	QFV81HJ-684	0.68MF	50V	T.FILM	
	C546	QFV81HJ-684	0.68MF	50V	T.FILM	
	C547	QFN81HJ-124	0.12MF	50V	MYLAR	
	C548	QFN81HJ-124	0.12MF	50V	MYLAR	
	C553	QETB1HM-475	4.7MF	50V	ELECTRO	
	C554	QETB1HM-475	4.7MF	50V	ELECTRO	
	C557	QCF21HP-223	0.022MF	50V	CERAMIC	
	C558	QCF21HP-223	0.022MF	50V	CERAMIC	
	C559	QCF21HP-223	0.022MF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-222	2.2K	1/6W	CARBON	
	R302	QRD167J-222	2.2K	1/6W	CARBON	
	R303	QRD167J-473	47K	1/6W	CARBON	
	R304	QRD167J-473	47K	1/6W	CARBON	
	R305	QRD167J-621	620	1/6W	CARBON	
	R306	QRD167J-621	620	1/6W	CARBON	
	R307	QRD167J-393	39K	1/6W	CARBON	
	R308	QRD167J-393	39K	1/6W	CARBON	
	R309	QRD167J-474	470K	1/6W	CARBON	
	R310	QRD167J-474	470K	1/6W	CARBON	
	R311	QRD167J-104	100K	1/6W	CARBON	
	R312	QRD167J-104	100K	1/6W	CARBON	
⚠	R313	QRD14CJ-391S	390	1/4W	UNF.CARBON	
⚠	R314	QRD14CJ-391S	390	1/4W	UNF.CARBON	
⚠	R321	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R321	QRZ0077-470	47	1/4W	FUSIBLE	B
⚠	R321	QRZ0077-470	47	1/4W	FUSIBLE	C
⚠	R321	QRZ0077-470	47	1/4W	FUSIBLE	D
⚠	R321	QRZ0077-470	47	1/4W	FUSIBLE	E
⚠	R322	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R322	QRZ0077-470	47	1/4W	FUSIBLE	B
⚠	R322	QRZ0077-470	47	1/4W	FUSIBLE	C
⚠	R322	QRZ0077-470	47	1/4W	FUSIBLE	D
⚠	R322	QRZ0077-470	47	1/4W	FUSIBLE	E
	R335	QRD167J-103	10K	1/6W	CARBON	
	R336	QRD167J-103	10K	1/6W	CARBON	
	R337	QRD167J-103	10K	1/6W	CARBON	
	R338	QRD167J-154	150K	1/6W	CARBON	
	R339	QRD167J-103	10K	1/6W	CARBON	
	R341	QRD167J-103	10K	1/6W	CARBON	
	R342	QRD167J-104	100K	1/6W	CARBON	
	R344	QRD167J-104	100K	1/6W	CARBON	
	R345	QRD167J-103	10K	1/6W	CARBON	
	R346	QRD167J-103	10K	1/6W	CARBON	
	R347	QRD167J-103	10K	1/6W	CARBON	
	R348	QRD167J-104	100K	1/6W	CARBON	
	R349	QRD167J-682	6.8K	1/6W	CARBON	
	R350	QRD167J-104	100K	1/6W	CARBON	
	R351	QRD167J-332	3.3K	1/6W	CARBON	
	R354	QRD167J-473	47K	1/6W	CARBON	
⚠	R361	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R361	QRZ0077-470	47	1/4W	FUSIBLE	B
⚠	R361	QRZ0077-470	47	1/4W	FUSIBLE	C
⚠	R361	QRZ0077-470	47	1/4W	FUSIBLE	D
⚠	R361	QRZ0077-470	47	1/4W	FUSIBLE	E
⚠	R362	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R362	QRZ0077-470	47	1/4W	FUSIBLE	B
⚠	R362	QRZ0077-470	47	1/4W	FUSIBLE	C
⚠	R362	QRZ0077-470	47	1/4W	FUSIBLE	D
⚠	R362	QRZ0077-470	47	1/4W	FUSIBLE	E
	R363	QRD167J-105	1M	1/6W	CARBON	
	R364	QRD167J-105	1M	1/6W	CARBON	
	R365	QRD167J-563	56K	1/6W	CARBON	
	R366	QRD167J-563	56K	1/6W	CARBON	
	R367	QRD167J-563	56K	1/6W	CARBON	
	R368	QRD167J-563	56K	1/6W	CARBON	
	R369	QRD167J-104	100K	1/6W	CARBON	
	R370	QRD167J-104	100K	1/6W	CARBON	
	R371	QRD167J-103	10K	1/6W	CARBON	B
	R371	QRD167J-103	10K	1/6W	CARBON	C
	R371	QRD167J-103	10K	1/6W	CARBON	D
	R371	QRD167J-103	10K	1/6W	CARBON	E
	R371	QRD167J-153	15K	1/6W	CARBON	A
	R372	QRD167J-103	10K	1/6W	CARBON	B
	R372	QRD167J-103	10K	1/6W	CARBON	C
	R372	QRD167J-103	10K	1/6W	CARBON	D
	R372	QRD167J-103	10K	1/6W	CARBON	E
	R372	QRD167J-153	15K	1/6W	CARBON	A
	R373	QRD167J-203	20K	1/6W	CARBON	
	R374	QRD167J-203	20K	1/6W	CARBON	
	R375	QRD167J-105	1M	1/6W	CARBON	
	R376	QRD167J-105	1M	1/6W	CARBON	
	R377	QRD167J-103	10K	1/6W	CARBON	
	R381	QRD167J-471	470	1/6W	CARBON	
	R382	QRD167J-471	470	1/6W	CARBON	
	R383	QRD167J-471	470	1/6W	CARBON	
	R384	QRD167J-471	470	1/6W	CARBON	
	R385	QRD167J-222	2.2K	1/6W	CARBON	E
	R385	QRD167J-471	470	1/6W	CARBON	A
	R385	QRD167J-471	470	1/6W	CARBON	B
	R385	QRD167J-471	470	1/6W	CARBON	C
	R385	QRD167J-471	470	1/6W	CARBON	D
	R386	QRD167J-222	2.2K	1/6W	CARBON	E
	R386	QRD167J-471	470	1/6W	CARBON	A
	R386	QRD167J-471	470	1/6W	CARBON	B
	R386	QRD167J-471	470	1/6W	CARBON	C
	R386	QRD167J-471	470	1/6W	CARBON	D
	R387	QRD167J-222	2.2K	1/6W	CARBON	E
	R387	QRD167J-471	470	1/6W	CARBON	A
	R387	QRD167J-471	470	1/6W	CARBON	B

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R387	QRD167J-471	470 1/6W CARBON	C
	R387	QRD167J-471	470 1/6W CARBON	D
	R388	QRD167J-222	2.2K 1/6W CARBON	E
	R388	QRD167J-471	470 1/6W CARBON	A
	R388	QRD167J-471	470 1/6W CARBON	B
	R388	QRD167J-471	470 1/6W CARBON	C
	R388	QRD167J-471	470 1/6W CARBON	D
	R389	QRD167J-471	470 1/6W CARBON	
	R390	QRD167J-471	470 1/6W CARBON	
	R391	QRD167J-105	1M 1/6W CARBON	
	R392	QRD167J-105	1M 1/6W CARBON	
	R401	QRD167J-473	47K 1/6W CARBON	
	R402	QRD167J-473	47K 1/6W CARBON	
	R403	QRD167J-473	47K 1/6W CARBON	
	R404	QRD167J-473	47K 1/6W CARBON	
	R405	QRD167J-473	47K 1/6W CARBON	
	R406	QRD167J-512	5.1K 1/6W CARBON	
	R407	QRD167J-473	47K 1/6W CARBON	
	R408	QRD167J-123	12K 1/6W CARBON	
	R411	QRD167J-271	270 1/6W CARBON	
	R421	QRD167J-105	1M 1/6W CARBON	
	R422	QRD167J-152	1.5K 1/6W CARBON	
	R423	QRD167J-103	10K 1/6W CARBON	
	R424	QRD167J-473	47K 1/6W CARBON	
	R425	QRD167J-473	47K 1/6W CARBON	
	R426	QRD167J-473	47K 1/6W CARBON	
	R427	QRD167J-473	47K 1/6W CARBON	
	R428	QRD167J-221	220 1/6W CARBON	
	R429	QRD167J-272	2.7K 1/6W CARBON	
	R430	QRD167J-220	22 1/6W CARBON	
	R441	QRD167J-562	5.6K 1/6W CARBON	
	R442	QRD167J-153	15K 1/6W CARBON	
	R443	QRD167J-273	27K 1/6W CARBON	
	R444	QRD167J-683	68K 1/6W CARBON	
	R445	QRD167J-512	5.1K 1/6W CARBON	
	R446	QRD167J-273	27K 1/6W CARBON	
	R451	QRD167J-103	10K 1/6W CARBON	
	R452	QRD167J-471	470 1/6W CARBON	
	R453	QRD167J-473	47K 1/6W CARBON	
	R454	QRD167J-223	22K 1/6W CARBON	
	R455	QRD167J-103	10K 1/6W CARBON	
	R461	QRD167J-103	10K 1/6W CARBON	
	R462	QRD167J-471	470 1/6W CARBON	
	R463	QRD167J-473	47K 1/6W CARBON	
	R464	QRD167J-223	22K 1/6W CARBON	
	R465	QRD167J-103	10K 1/6W CARBON	
	R491	QRD167J-473	47K 1/6W CARBON	
	R492	QRD167J-331	330 1/6W CARBON	
	R501	QRD167J-203	20K 1/6W CARBON	
	R502	QRD167J-203	20K 1/6W CARBON	
	R503	QRD167J-154	150K 1/6W CARBON	
	R504	QRD167J-154	150K 1/6W CARBON	
	R505	QRD167J-184	180K 1/6W CARBON	
	R506	QRD167J-184	180K 1/6W CARBON	
	R507	QRD167J-102	1K 1/6W CARBON	
	R508	QRD167J-102	1K 1/6W CARBON	
	R509	QRD167J-103	10K 1/6W CARBON	
	R510	QRD167J-103	10K 1/6W CARBON	
	R511	QRD167J-103	10K 1/6W CARBON	
	R512	QRD167J-103	10K 1/6W CARBON	
	R513	QRD167J-224	220K 1/6W CARBON	
	R514	QRD167J-224	220K 1/6W CARBON	
	R515	QRD167J-154	150K 1/6W CARBON	
	R516	QRD167J-154	150K 1/6W CARBON	
	R517	QRD167J-682	6.8K 1/6W CARBON	
	R518	QRD167J-682	6.8K 1/6W CARBON	
	R519	QRD167J-103	10K 1/6W CARBON	
	R520	QRD167J-103	10K 1/6W CARBON	
	R521	QRD167J-104	100K 1/6W CARBON	
	R522	QRD167J-104	100K 1/6W CARBON	
⚠	R533	QRD14CJ-331S	330 1/4W UNF.CARBON	
⚠	R534	QRD14CJ-391S	390 1/4W UNF.CARBON	
	R537	QRD167J-681	680 1/6W CARBON	
	R538	QRD167J-272	2.7K 1/6W CARBON	
	R541	QRD167J-270	27 1/6W CARBON	
	R542	QRD167J-100	10 1/6W CARBON	
	RA501	QRB079J-474	470K 1/10W R.NETWORK	
	RA502	QRB079J-474	470K 1/10W R.NETWORK	

⚠ : SAFETY PARTS

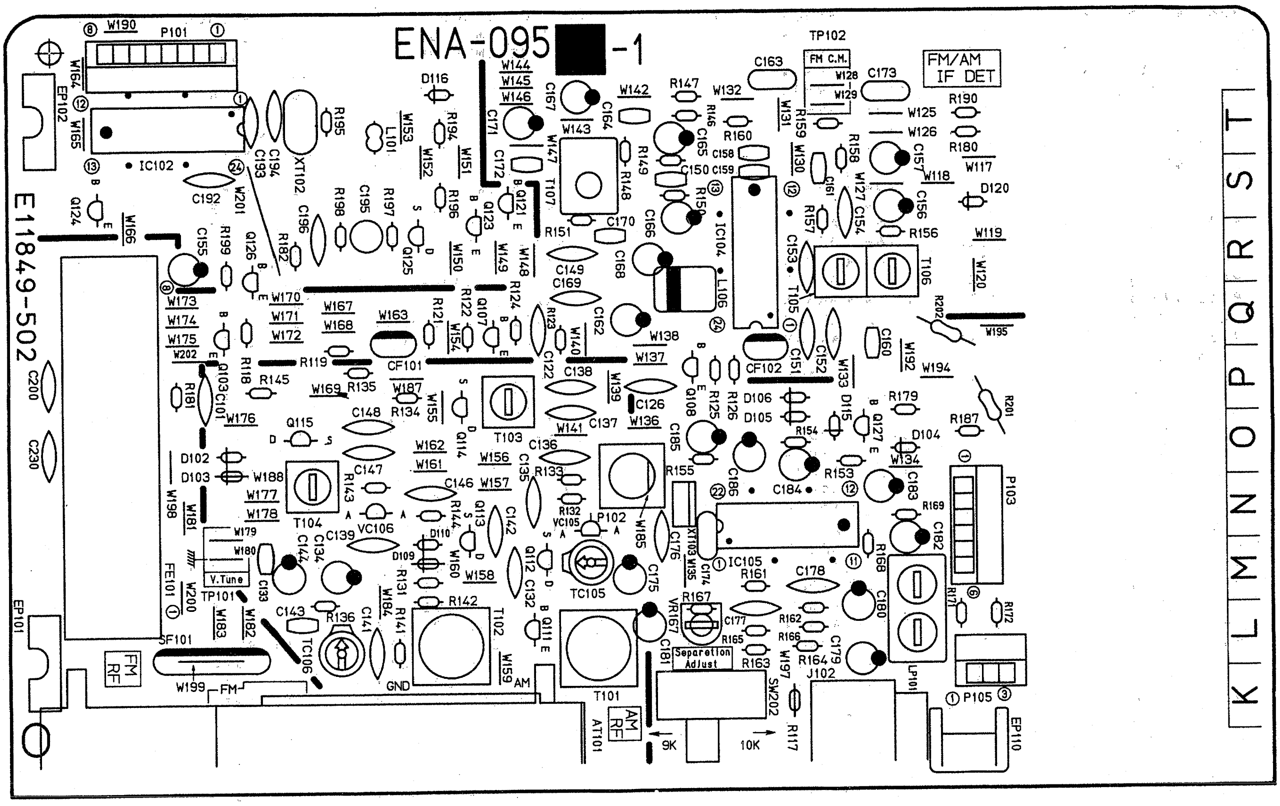
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E12194-003	CIRCUIT BOARD	
		E306692-001	HOLDER	
		E3400-444	FELT SPACER	
	J301	EMN00TV-604A	6P PIN JACK	
	J302	EMN00TV-604A	6P PIN JACK	
	P301	VMC0107-005	CONNECTOR	
	P303	QMV5005-002K	PLUG ASSY	
	P341	VMC0107-007	SOCKET	
	P701	VMC0107-003	CONNECTOR	
	EP401	E70859-001	EARTH PLATE	
	FL401	ELU0001-097	FL TUBE	
	FW101	EWR38B-25LST	FLAT WIRE	
	FW103	EWR36B-25LST	FLAT WIRE	
	FW105	EWR33B-35LST	FLAT WIRE	B
	FW341	EWR37B-35LST	FLAT WIRE	
	FW801	EWR33B-45LST	FLAT WIRE	
	FW803	EWR34B-25LST	FLAT WIRE	
	PA401	E75899-001	CONNECTOR	
	PA402	E75899-001	CONNECTOR	
	PA403	E75899-001	CONNECTOR	
	PB401	EMV7124-010	CONNECTOR	
	PB402	EMV7124-010	CONNECTOR	
	SW401	ESP0001-018	TACT SWITCH	
	SW402	ESP0001-018	TACT SWITCH	
	SW403	ESP0001-018	TACT SWITCH	
	SW404	ESP0001-018	TACT SWITCH	
	SW405	ESP0001-018	TACT SWITCH	
	SW406	ESP0001-018	TACT SWITCH	
	SW407	ESP0001-018	TACT SWITCH	
	SW408	ESP0001-018	TACT SWITCH	
	SW409	ESP0001-018	TACT SWITCH	
	SW410	ESP0001-018	TACT SWITCH	
	SW411	ESP0001-018	TACT SWITCH	
	SW412	ESP0001-018	TACT SWITCH	
	SW413	ESP0001-018	TACT SWITCH	
	SW414	ESP0001-018	TACT SWITCH	
	SW415	ESP0001-018	TACT SWITCH	
	SW416	ESP0001-018	TACT SWITCH	
	SW417	ESP0001-018	TACT SWITCH	
	SW418	ESP0001-018	TACT SWITCH	
	SW419	ESP0001-018	TACT SWITCH	
	SW420	ESP0001-018	TACT SWITCH	
	SW421	ESP0001-018	TACT SWITCH	
	SW422	ESP0001-018	TACT SWITCH	
	SW423	ESP0001-018	TACT SWITCH	
	SW424	ESP0001-018	TACT SWITCH	
	SW425	ESP0001-018	TACT SWITCH	
	SW426	ESP0001-018	TACT SWITCH	
	SW427	ESP0001-018	TACT SWITCH	
	SW428	ESP0001-018	TACT SWITCH	
	SW429	ESP0001-018	TACT SWITCH	
	SW430	ESP0001-018	TACT SWITCH	
	XT401	ECX0072-000EM	RESONATOR	
	XT421	ECX0001-000KS	RESONATOR	

⚠ : SAFETY PARTS

■ ENA-095☐ Tuner PC Board Ass'y

Note : ENA-095☐ Varies according to the areas employed. See note (1) when placing an order.


ENA-095█-1
E11849-502
P101
IC102
IC104
IC105
TP101
TP102
FM C.M.
FM/AM IF DET
P102
P103
P105
J102
SW202
T101
T102
T103
T104
T105
T106
T107
TC105
TC106
VC105
VC106
VR167
CF101
CF102
SF101
FE101
EP101
EP102
EP110
AT101
LP101
V.Tune
Separation Adjust
FM RF
AM RF
FM
AM
GND
9K
10K
K
L
M
N
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T

Note (1)

PC Board Ass'y	Designated Areas
ENA-095 H	the U. S. A. , Canada
ENA-095 I	Other Countries
ENA-095 J	Australia
ENA-095 K	Europe
ENA-095 L	West Germany
ENA-095 M	the U. K. (with LW)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q103	2SC461(B,C)	SILICON	HITACHI	
	Q107	2SC535(B,C)	SILICON	HITACHI	
	Q108	2SC461(B,C)	SILICON	HITACHI	
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	K
	Q111	2SD1302(S,T)	SILICON	MATSUSHITA	M
	Q112	2SK301(Q,R)	F.E.T	MATSUSHITA	
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	K
	Q113	2SK301(Q,R)	F.E.T	MATSUSHITA	M
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	K
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	M
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	K
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	M
	Q121	AN1A4P	SILICON	NEC	K
	Q121	AN1A4P	SILICON	NEC	M
	Q123	AN1A4P	SILICON	NEC	
	Q124	AN1A4P	SILICON	NEC	
	Q125	2SK301(Q2)	F.E.T	MATSUSHITA	
	Q126	2SC458(D)	SILICON	HITACHI	
	Q127	AA1L4M	SI.TRANSIS	NEC	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC102	LC7218	I.C.	SANYO	
	IC104	LA1266A	I.C.	SANYO	
	IC105	LA3401	I.C.	SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D102	1SS119	SILICON	HITACHI	K
	D102	1SS119	SILICON	HITACHI	M
	D103	1SS119	SILICON	HITACHI	K
	D103	1SS119	SILICON	HITACHI	M
	D104	1SS119	SILICON	HITACHI	
	D105	1SS119	SILICON	HITACHI	
	D106	1SS119	SILICON	HITACHI	
	D109	1SS119	SILICON	HITACHI	K
	D109	1SS119	SILICON	HITACHI	M
	D110	1SS119	SILICON	HITACHI	K
	D110	1SS119	SILICON	HITACHI	M
	D115	1SS119	SILICON	HITACHI	
	D116	1SS119	SILICON	HITACHI	
	D120	1SS119	SILICON	HITACHI	
	VC105	SVC342(L)	VARICAP	SANYO	
	VC106	SVC342(L)	VARICAP	SANYO	K
	VC106	SVC342(L)	VARICAP	SANYO	M

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C101	QCF21HP-223	0.022MF	50V	CERAMIC	
	C122	QCF21HP-223	0.022MF	50V	CERAMIC	
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	
	C132	QCS21HJ-561	560PF	50V	CERAMIC	
	C133	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C134	QETB1EM-106	10MF	25V	ELECTRO	
	C135	QCC21EM-223	0.022MF	25V	CERAMIC	
	C136	QCT26CH-180	18PF	50V	CERAMIC	
	C137	QCT26CH-221	220PF	50V	CERAMIC	
	C138	QCT26CH-241	240PF	50V	CERAMIC	
	C139	QCC21EM-223	0.022MF	25V	CERAMIC	K
	C139	QCC21EM-223	0.022MF	25V	CERAMIC	M
	C141	QCS21HJ-270	27PF	50V	CERAMIC	K
	C141	QCS21HJ-270	27PF	50V	CERAMIC	M
	C142	QCY21HK-272	2700PF	50V	CERAMIC	K
	C142	QCY21HK-272	2700PF	50V	CERAMIC	M
	C143	QCHB1EZ-223	0.022MF	25V	CERAMIC	K
	C143	QCHB1EZ-223	0.022MF	25V	CERAMIC	M
	C144	QETB1EM-106	10MF	25V	ELECTRO	K
	C144	QETB1EM-106	10MF	25V	ELECTRO	M
	C146	QCT26CH-680	68PF	50V	CERAMIC	K
	C146	QCT26CH-680	68PF	50V	CERAMIC	M
	C147	QCT26CH-220	22PF	50V	CERAMIC	K
	C147	QCT26CH-220	22PF	50V	CERAMIC	M
	C148	QCT26CH-121	120PF	50V	CERAMIC	K
	C148	QCT26CH-121	120PF	50V	CERAMIC	M
	C149	QCF21HP-223	0.022MF	50V	CERAMIC	
	C150	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C151	QCF21HP-223	0.022MF	50V	CERAMIC	
	C152	QCF21HP-223	0.022MF	50V	CERAMIC	
	C153	QCC21EM-223	0.022MF	25V	CERAMIC	
	C154	QCF21HP-223	0.022MF	50V	CERAMIC	
	C155	QETB1EM-226	22MF	25V	ELECTRO	
	C156	QETB1HM-475	4.7MF	50V	ELECTRO	
	C157	QETB1HM-474	0.47MF	50V	ELECTRO	
	C158	QCBB1HK-101	100PF	50V	CERAMIC	
	C159	QCBB1HK-101	100PF	50V	CERAMIC	
	C160	QCBB1HK-101	100PF	50V	CERAMIC	K
	C160	QCBB1HK-101	100PF	50V	CERAMIC	M
	C160	QCBB1HK-221	220PF	50V	CERAMIC	H
	C160	QCBB1HK-221	220PF	50V	CERAMIC	I
	C160	QCBB1HK-221	220PF	50V	CERAMIC	J
	C160	QCBB1HK-221	220PF	50V	CERAMIC	L
	C161	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C162	QETB1EM-106	10MF	25V	ELECTRO	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C163	QFN81HJ-332	3300PF	50V	MYLAR	
	C164	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C165	QETB1HM-474	0.47MF	50V	ELECTRO	
	C166	QETB1HM-225	2.2MF	50V	ELECTRO	
	C167	QETB1HM-225	2.2MF	50V	ELECTRO	
	C168	QETB1HM-475	4.7MF	50V	ELECTRO	
	C169	QCF21HP-223	0.022MF	50V	CERAMIC	
	C170	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C171	QETB1EM-106	10MF	25V	ELECTRO	
	C172	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C173	QFN81HK-223	0.022MF	50V	MYLAR	
	C174	QFN81HK-473	0.047MF	50V	MYLAR	
	C175	QETB1EM-106	10MF	25V	ELECTRO	
	C176	QCY21HK-102	1000PF	50V	CERAMIC	
	C177	QCS21HJ-271	270PF	50V	CERAMIC	J
	C177	QCS21HJ-271	270PF	50V	CERAMIC	K
	C177	QCS21HJ-271	270PF	50V	CERAMIC	L
	C177	QCS21HJ-271	270PF	50V	CERAMIC	M
	C177	QCS21HJ-561	560PF	50V	CERAMIC	H
	C177	QCS21HJ-561	560PF	50V	CERAMIC	I
	C178	QCS21HJ-271	270PF	50V	CERAMIC	J
	C178	QCS21HJ-271	270PF	50V	CERAMIC	K
	C178	QCS21HJ-271	270PF	50V	CERAMIC	L
	C178	QCS21HJ-271	270PF	50V	CERAMIC	M
	C178	QCS21HJ-561	560PF	50V	CERAMIC	H
	C178	QCS21HJ-561	560PF	50V	CERAMIC	I
	C179	QETB1HM-225	2.2MF	50V	ELECTRO	
	C180	QETB1HM-225	2.2MF	50V	ELECTRO	
	C181	QETB1EM-106	10MF	25V	ELECTRO	
	C182	QETB1HM-225	2.2MF	50V	ELECTRO	
	C183	QETB1HM-105	1MF	50V	ELECTRO	
	C184	QETB1HM-105	1MF	50V	ELECTRO	
	C185	QETB1HM-225	2.2MF	50V	ELECTRO	
	C186	QETB1HM-474	0.47MF	50V	ELECTRO	
	C192	QCC21EM-473	0.047MF	25V	CERAMIC	
	C193	QCS21HJ-180	18PF	50V	CERAMIC	
	C194	QCS21HJ-180	18PF	50V	CERAMIC	
	C195	QEN51HM-474	0.47MF	50V	NON POLE	
	C196	QCY21HK-102	1000PF	50V	CERAMIC	
	C230	QCF21HP-103	0.01MF	50V	CERAMIC	
	TC105	ENZ1003-006			TRIMMER	
	TC106	ENZ1003-006			TRIMMER	K
	TC106	ENZ1003-006			TRIMMER	M

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R117	QRD167J-100	10	1/6W	CARBON	
	R118	QRD167J-332	3.3K	1/6W	CARBON	
	R119	QRD167J-221	220	1/6W	CARBON	
	R121	QRD167J-391	390	1/6W	CARBON	
	R122	QRD167J-272	2.7K	1/6W	CARBON	
	R123	QRD167J-102	1K	1/6W	CARBON	
	R124	QRD167J-681	680	1/6W	CARBON	
	R125	QRD167J-332	3.3K	1/6W	CARBON	
	R126	QRD167J-221	220	1/6W	CARBON	
	R131	QRD167J-331	330	1/6W	CARBON	
	R132	QRD167J-103	10K	1/6W	CARBON	
	R133	QRD167J-473	47K	1/6W	CARBON	
	R134	QRD167J-103	10K	1/6W	CARBON	K
	R134	QRD167J-103	10K	1/6W	CARBON	M
	R135	QRD167J-470	47	1/6W	CARBON	
	R136	QRD167J-103	10K	1/6W	CARBON	
	R141	QRD167J-472	4.7K	1/6W	CARBON	K
	R141	QRD167J-472	4.7K	1/6W	CARBON	M
	R142	QRD167J-331	330	1/6W	CARBON	K
	R142	QRD167J-331	330	1/6W	CARBON	M
	R143	QRD167J-103	10K	1/6W	CARBON	K
	R143	QRD167J-103	10K	1/6W	CARBON	M
	R144	QRD167J-473	47K	1/6W	CARBON	K
	R144	QRD167J-473	47K	1/6W	CARBON	M
	R145	QRD167J-103	10K	1/6W	CARBON	K
	R145	QRD167J-103	10K	1/6W	CARBON	M
	R146	QRD167J-560	56	1/6W	CARBON	
	R147	QRD167J-103	10K	1/6W	CARBON	
	R148	QRD167J-103	10K	1/6W	CARBON	
	R149	QRD167J-223	22K	1/6W	CARBON	
	R150	QRD167J-103	10K	1/6W	CARBON	
	R151	QRD167J-224	220K	1/6W	CARBON	
	R153	QRD167J-103	10K	1/6W	CARBON	
	R154	QRD167J-103	10K	1/6W	CARBON	
	R155	QRD167J-562	5.6K	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R156	QRD167J-822	8.2K	1/6W	CARBON	
	R157	QRD167J-103	10K	1/6W	CARBON	
	R158	QRD167J-183	18K	1/6W	CARBON	H
	R158	QRD167J-333	33K	1/6W	CARBON	I
	R158	QRD167J-333	33K	1/6W	CARBON	J
	R158	QRD167J-333	33K	1/6W	CARBON	K
	R158	QRD167J-333	33K	1/6W	CARBON	L
	R158	QRD167J-333	33K	1/6W	CARBON	M
	R159	QRD167J-561	560	1/6W	CARBON	
	R160	QRD167J-123	12K	1/6W	CARBON	H
	R160	QRD167J-123	12K	1/6W	CARBON	I
	R160	QRD167J-273	27K	1/6W	CARBON	J
	R160	QRD167J-273	27K	1/6W	CARBON	K
	R160	QRD167J-273	27K	1/6W	CARBON	L
	R160	QRD167J-273	27K	1/6W	CARBON	M
	R161	QRD167J-124	120K	1/6W	CARBON	H
	R161	QRD167J-124	120K	1/6W	CARBON	I
	R161	QRD167J-184	180K	1/6W	CARBON	J
	R161	QRD167J-184	180K	1/6W	CARBON	K
	R161	QRD167J-184	180K	1/6W	CARBON	L
	R161	QRD167J-184	180K	1/6W	CARBON	M
	R162	QRD167J-124	120K	1/6W	CARBON	H
	R162	QRD167J-124	120K	1/6W	CARBON	I
	R162	QRD167J-184	180K	1/6W	CARBON	J
	R162	QRD167J-184	180K	1/6W	CARBON	K
	R162	QRD167J-184	180K	1/6W	CARBON	L
	R162	QRD167J-184	180K	1/6W	CARBON	M
	R163	QRD167J-332	3.3K	1/6W	CARBON	
	R164	QRD167J-332	3.3K	1/6W	CARBON	
	R165	QRD167J-184	180K	1/6W	CARBON	H
	R165	QRD167J-184	180K	1/6W	CARBON	I
	R165	QRD167J-274	270K	1/6W	CARBON	J
	R165	QRD167J-274	270K	1/6W	CARBON	K
	R165	QRD167J-274	270K	1/6W	CARBON	L
	R165	QRD167J-274	270K	1/6W	CARBON	M
	R166	QRD167J-184	180K	1/6W	CARBON	H
	R166	QRD167J-184	180K	1/6W	CARBON	I
	R166	QRD167J-274	270K	1/6W	CARBON	J
	R166	QRD167J-274	270K	1/6W	CARBON	K
	R166	QRD167J-274	270K	1/6W	CARBON	L
	R166	QRD167J-274	270K	1/6W	CARBON	M
	R167	QRD167J-393	39K	1/6W	CARBON	H
	R167	QRD167J-393	39K	1/6W	CARBON	I
	R168	QRD167J-103	10K	1/6W	CARBON	
	R169	QRD167J-103	10K	1/6W	CARBON	
	R171	QRD167J-682	6.8K	1/6W	CARBON	
	R172	QRD167J-682	6.8K	1/6W	CARBON	
	R179	QRD167J-562	5.6K	1/6W	CARBON	
	R180	QRD167J-472	4.7K	1/6W	CARBON	
	R181	QRD167J-222	2.2K	1/6W	CARBON	
	R182	QRD167J-181	180	1/6W	CARBON	
	R187	QRD167J-101	100	1/6W	CARBON	
	R190	QRD167J-472	4.7K	1/6W	CARBON	
	R194	QRD167J-472	4.7K	1/6W	CARBON	
	R195	QRD167J-473	47K	1/6W	CARBON	
	R196	QRD167J-103	10K	1/6W	CARBON	H
	R196	QRD167J-103	10K	1/6W	CARBON	I
	R196	QRD167J-103	10K	1/6W	CARBON	J
	R196	QRD167J-222	2.2K	1/6W	CARBON	K
	R196	QRD167J-222	2.2K	1/6W	CARBON	L
	R196	QRD167J-222	2.2K	1/6W	CARBON	M
	R197	QRD167J-222	2.2K	1/6W	CARBON	
	R198	QRD167J-332	3.3K	1/6W	CARBON	H
	R198	QRD167J-332	3.3K	1/6W	CARBON	I
	R198	QRD167J-332	3.3K	1/6W	CARBON	J
	R198	QRD167J-822	8.2K	1/6W	CARBON	K
	R198	QRD167J-822	8.2K	1/6W	CARBON	L
	R198	QRD167J-822	8.2K	1/6W	CARBON	M
	R199	QRD167J-472	4.7K	1/6W	CARBON	
⚠	R201	QRD145J-680S	68	1/4W	UNF.CARBON	H
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	I
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	J
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	K
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	L
⚠	R201	QRZ0062-680	68	1/4W	FUSIBLE	M
⚠	R202	QRD145J-470S	47	1/4W	UNF.CARBON	H
⚠	R202	QRZ0062-220	22	1/4W	FUSIBLE	L
⚠	R202	QRZ0062-470	47	1/4W	FUSIBLE	I
⚠	R202	QRZ0062-470	47	1/4W	FUSIBLE	J
⚠	R202	QRZ0062-470	47	1/4W	FUSIBLE	K
⚠	R202	QRZ0062-470	47	1/4W	FUSIBLE	M
	VR167	QVPE601-104	100K	0.15W	VARIABLE	J
	VR167	QVPE601-104	100K	0.15W	VARIABLE	K
	VR167	QVPE601-104	100K	0.15W	VARIABLE	L
	VR167	QVPE601-104	100K	0.15W	VARIABLE	M

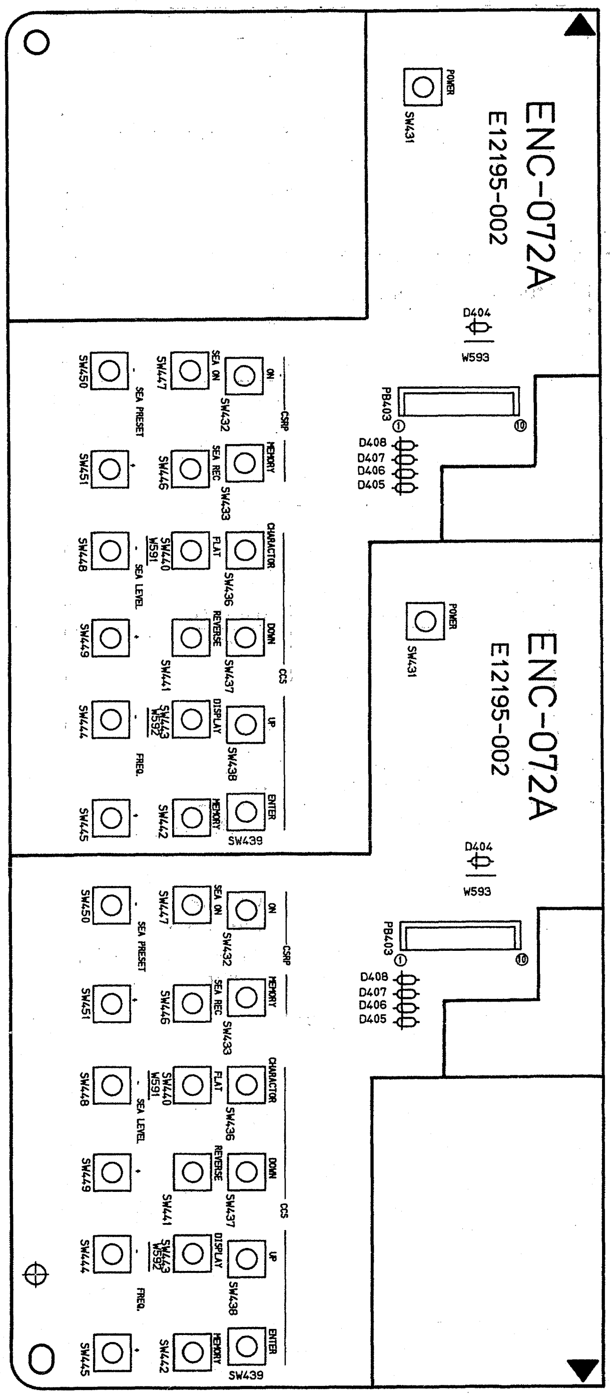
⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11849-502	CIRCUIT BOARD	
	J102	QMS3501-021	MINI JACK	
	L101	EQL4004-1R0	INDUCTOR	
	L106	EQL3001-102K	INDUCTOR	
	P101	EMV7112-008	CONNECTOR	
	P103	EMV7112-006	CONNECTOR	
	P105	EMV7112-003	CONNECTOR	I
	T101	EQR1111-014	AM RF COIL	
	T102	EQR1111-005	AM RF COIL	K
	T102	EQR1111-005	AM RF COIL	M
	T103	EQR1207-015	MW OSC COIL	
	T104	EQR1307-009	LW OSC COIL	K
	T104	EQR1307-009	LW OSC COIL	M
	T105	EQT2140-012	I.F. TRANSFORMER	
	T106	EQT2140-013	I.F. TRANSFORMER	
	T107	ECB1560-006	CERAMIC FILTER	
	AT101	EMB41YV-301K	ANTENNA TERMINAL	K
	AT101	EMB41YV-301K	ANTENNA TERMINAL	L
	AT101	EMB41YV-401K	ANTENNA TERMINAL	H
	AT101	EMB41YV-401K	ANTENNA TERMINAL	I
	AT101	EMB41YV-401K	ANTENNA TERMINAL	J
	AT101	EMB41YV-401K	ANTENNA TERMINAL	M
	CF101	ECB2118-001R	CERAMIC FILTER	J
	CF101	ECB2118-001R	CERAMIC FILTER	K
	CF101	ECB2118-001R	CERAMIC FILTER	L
	CF101	ECB2118-001R	CERAMIC FILTER	M
	CF101	ECB2123-006R	CERAMIC FILTER	H
	CF101	ECB2123-006R	CERAMIC FILTER	I
	CF102	ECB2118-001R	CERAMIC FILTER	J
	CF102	ECB2118-001R	CERAMIC FILTER	K
	CF102	ECB2118-001R	CERAMIC FILTER	L
	CF102	ECB2118-001R	CERAMIC FILTER	M
	CF102	ECB2123-006R	CERAMIC FILTER	H
	CF102	ECB2123-006R	CERAMIC FILTER	I
	EP101	E70859-001	EARTH PLATE	
	EP102	E70859-001	EARTH PLATE	
	EP110	E70225-001	EARTH PLATE	
	FE101	EAF2203-001	FRONT END	H
	FE101	EAF2203-001	FRONT END	I
	FE101	EAF2203-001	FRONT END	J
	FE101	EAF2203-001	FRONT END	K
	FE101	EAF2203-001	FRONT END	M
	FE101	EAF2203-002	FRONT END	L
	LP101	EQF0101-002	LOW PASS FILTER	
	LP102	EQF0102-001	LOW PASS FILTER	L
	SF101	EQF0201-006	BAND PASS FILTER	L
	SW202	QSS1201-039	SLIDE SWITCH	I
	XT102	ECX0007-200KC	RESONATOR	
	XT103	ECX0000-456KR	RESONATOR	

⚠ : SAFETY PARTS

■ ENC-072Ⓐ Front Switch PC Board Ass'y


ENC-072A
E12195-002
POWER
SW431
D404
W593
PB403
①
⑩
D408
D407
D406
D405
ON
CSRP
SEA ON
SW432
SW447
SEA PRESET
SW450
MEMORY
SEA REC
SW433
SW446
SW451
CHARACTOR
FLAT
SW436
SW440
W591
SEA LEVEL
SW448
DOWN
REVERSE
SW437
SW441
CCS
SW449
UP
DISPLAY
SW438
SW443
W592
FREQ.
SW444
ENTER
MEMORY
SW439
SW442
SW445

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D404	1SS133	SILICON	ROHM	
	D405	1SS133	SILICON	ROHM	
	D406	1SS133	SILICON	ROHM	
	D407	1SS133	SILICON	ROHM	
	D408	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E12195-002(S)	CIRCUIT BOARD	
	PB403	EMV7124-010	CONNECTOR	
	SW431	ESP0001-018	TACT SWITCH	
	SW432	ESP0001-018	TACT SWITCH	
	SW433	ESP0001-018	TACT SWITCH	
	SW436	ESP0001-018	TACT SWITCH	
	SW437	ESP0001-018	TACT SWITCH	
	SW438	ESP0001-018	TACT SWITCH	
	SW439	ESP0001-018	TACT SWITCH	
	SW440	ESP0001-018	TACT SWITCH	
	SW441	ESP0001-018	TACT SWITCH	
	SW442	ESP0001-018	TACT SWITCH	
	SW443	ESP0001-018	TACT SWITCH	
	SW444	ESP0001-018	TACT SWITCH	
	SW445	ESP0001-018	TACT SWITCH	
	SW446	ESP0001-018	TACT SWITCH	
	SW447	ESP0001-018	TACT SWITCH	
	SW448	ESP0001-018	TACT SWITCH	
	SW449	ESP0001-018	TACT SWITCH	
	SW450	ESP0001-018	TACT SWITCH	
	SW451	ESP0001-018	TACT SWITCH	

⚠ : SAFETY PARTS

Accessories List

⚠	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1580A	Instruction Book	1		J
	E30580-1588A	Instruction Book	1		A, C, G, LE, LEF, U
	E30580-1588ABS	Instruction Book	1		LBS
	BT20060	Warranty Card	1		LBS
	E43486-340A	Safety Sheet	1		LBS
	BT20066A	EEC Agency	1		LBS
	E43486-371A	Sheet	1		LBS
⚠	EMC0202-001BS	AC Plug	1		LBS
	BT-20025K	Warranty Card	1		C
	BT20071A	Service Center List	1		C
	BT20029C	Warranty Card	1		A
	BT-20119	Warranty Card	1	for New Zealand	A
	BT-20117	Warranty Card	1		G
	QZL1008-001	FTZ Information Sheet	1		G
	E67007-001	Wire Antenna	1		G
	BT20044F	AM Loop Antenna	1		J
	BT-20048C	Warranty Card	1		J
	BT20108	Service Information	1		J
	E66416-003	Envelope	1		J
	QMF51E2-4R0	Fuse	1		U
	E67142-T4R0	Fuse Label	1		U
	QPGA005-00703	Envelope	1		U
	E35497-015	Caution Sheet	1	220V	U
⚠	E040A56	Siemens Plug	1		U
	EWP502-001	Built in Antenna	1		Except G
	EMZ2001-011	Adapter	1		LE, LEF
	UM-3DJ-2PSA	Battery	1		
	RM-SR503U	Remote Controler	1		
	RM-SR503UBATC	Battery Cover	1		
	EQB4001-015	AM Loop Antenna	1		
	E41202-2	Envelope	1	for Instruction Book	Except LBS
	E41202-2B	Envelope	1	for Instruction Book	LBS

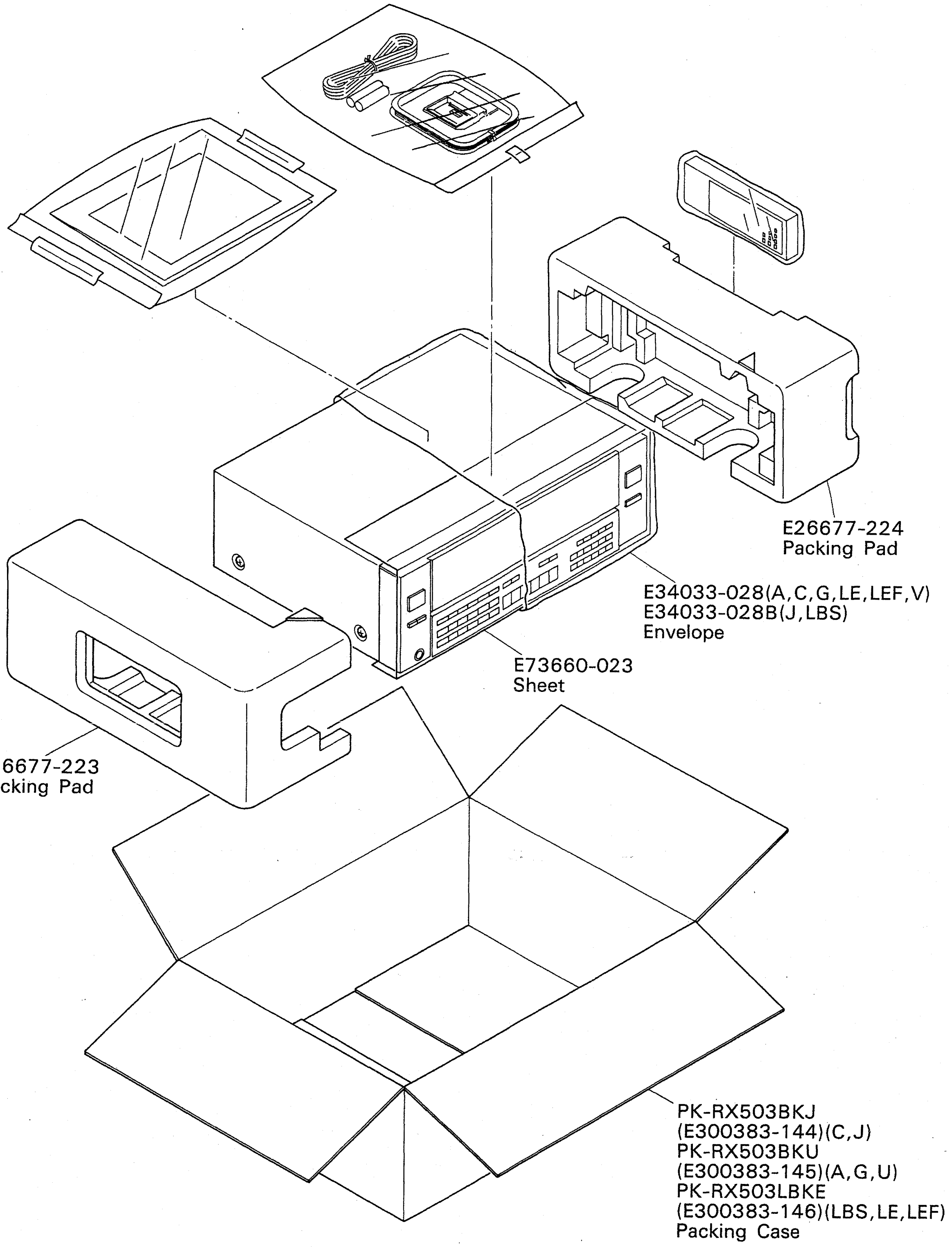
⚠ : Safety Parts

The Marks for Designated Areas

A	Australia	C	Canada
G	West Germany	J	the U. S. A.
LBS	the U. K. (with LW)	LE	Europe (with LW)
LEF	Europe	U	Other Countries

No mark indicates all areas.

Packing Materials and Part Numbers


E26677-224
Packing Pad
E34033-028(A,C,G,LE,LEF,V)
E34033-028B(J,LBS)
Envelope
E73660-023
Sheet
E26677-223
Packing Pad
PK-RX503BKJ
(E300383-144)(C,J)
PK-RX503BKU
(E300383-145)(A,G,U)
PK-RX503LBKE
(E300383-146)(LBS,LE,LEF)
Packing Case

The Marks for Designated Areas

A	Australia	C	Canada
G	West Germany	J	the U.S.A.
LBS	the U.K. (with LW)	LE	Europe (with LW)
LEF	Europe	U	Other Countries

No mark indicates all areas.

JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

RX-503BK
MODEL No. RX-503LBK

Supplement

(For West Germany)

A part of circuit in this unit is modified for the purpose of superior quality.
Use this manual reffering to the previously published Service Manual (No. 20160 Feb. 1990).

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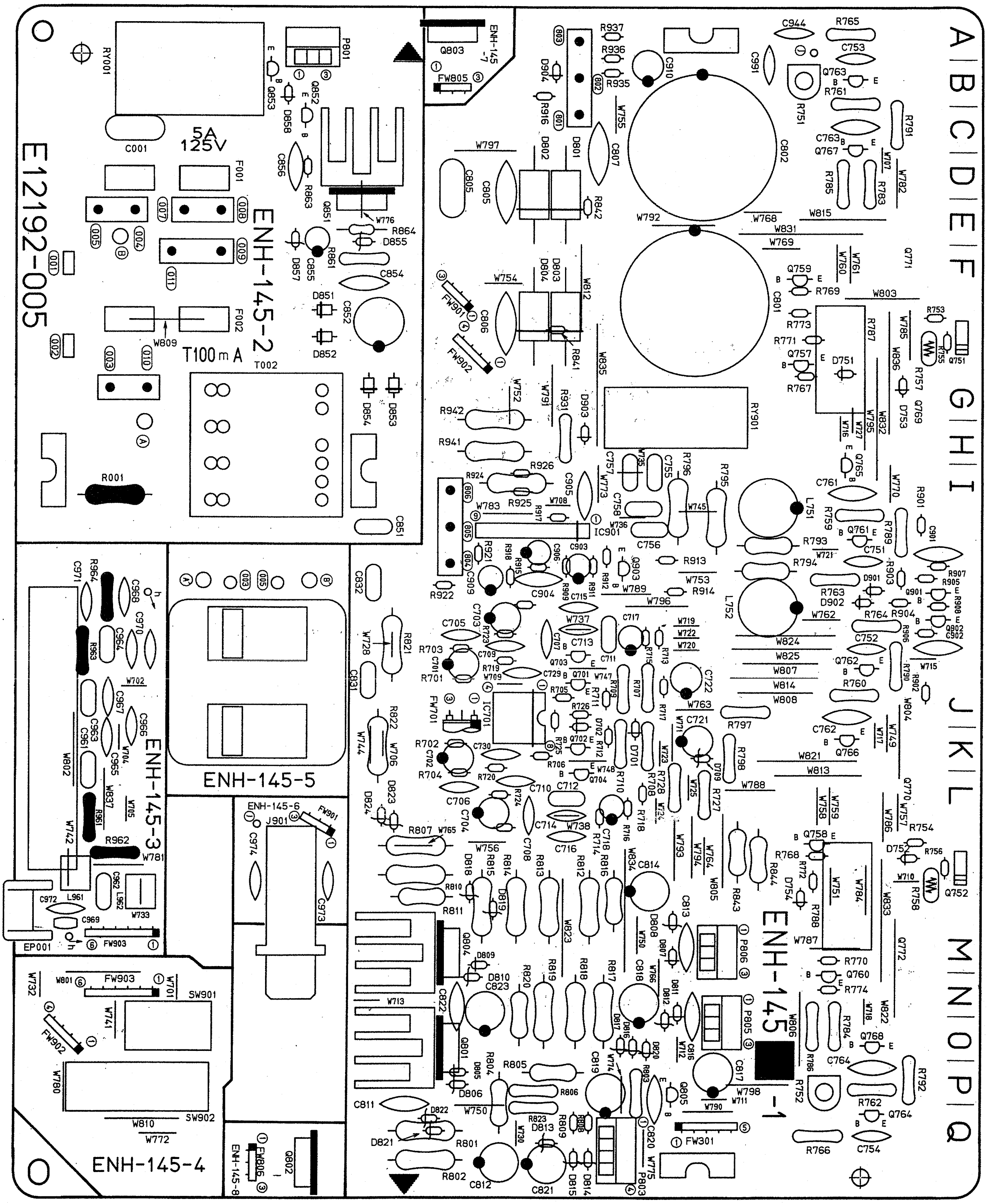
- ■ENH-145 L Power Amplifier PC Board Ass'y 2
- ■ENB-100 E Source Selector and SEA PC Board Ass'y 5

Schematic Diagram .... Insertion
Printed Circuit Boards .... Insertion

No.20160B
Jun.1990

Printed Circuit Board Ass'y and Parts List

■ENH-145Ⓛ Power Amplifier PC Board Ass'y


E12192-005
ENH-145-2
ENH-145-3
ENH-145-4
ENH-145-5
ENH-145-6
ENH-145-7
ENH-145-8
ENH-145-1
5A 125V
T100mA
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q701	2SC2389(S,E)	SILICON ROHM	
	Q702	2SC2389(S,E)	SILICON ROHM	
	Q703	2SA1038(R,S)	SILICON ROHM	
	Q704	2SA1038(R,S)	SILICON ROHM	
	Q751	2SD636(Q,R)	SILICON MATSUSHITA	
	Q752	2SD636(Q,R)	SILICON MATSUSHITA	
	Q757	2SC945A(P,Q)	SILICON NEC	
	Q758	2SC945A(P,Q)	SILICON NEC	
	Q759	2SA733A(P,Q)	SILICON NEC	
	Q760	2SA733A(P,Q)	SILICON NEC	
	Q761	2SC2389(S)	SILICON ROHM	
	Q762	2SC2389(S)	SILICON ROHM	
	Q763	2SA1038(S)	SILICON ROHM	
	Q764	2SA1038(S)	SILICON ROHM	
	Q765	2SC2235(O,Y)	SILICON TOSHIBA	
	Q766	2SC2235(O,Y)	SILICON TOSHIBA	
	Q767	2SA965(O,Y)	SILICON TOSHIBA	
	Q768	2SA965(O,Y)	SILICON TOSHIBA	
	Q769	2SC3854LC(O,Y)	SILICON SANKEN	
	Q770	2SC3854LC(O,Y)	SILICON SANKEN	
	Q771	2SA1490LC(O,Y)	SILICON SANKEN	
	Q772	2SA1490LC(O,Y)	SILICON SANKEN	
	Q801	2SB1187(E,F)	SILICON ROHM	
	Q802	2SD2061(E,F)	SILICON ROHM	
	Q803	2SD2061(E,F)	SILICON ROHM	
	Q804	2SD2061(E,F)	SILICON ROHM	
	Q805	2SA965(O,Y)	SILICON TOSHIBA	
	Q852	2SC2235(O,Y)	SILICON TOSHIBA	
	Q853	DTC143TS	SILICON ROHM	
	Q901	2SC1775AV(E,F)	SILICON HITACHI	
	Q902	2SC1775AV(E,F)	SILICON HITACHI	
	Q903	2SA872AV(D,E)	SILICON HITACHI	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC701	NJM4560DD	I.C. DAINICHI	
	IC901	TA7317P	I.C. TOSHIBA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D701	1SS133	SILICON ROHM	
	D702	1SS133	SILICON ROHM	
	D709	MTZ3.0JB	ZENER ROHM	
	D751	1SS133	SILICON ROHM	
	D752	1SS133	SILICON ROHM	
	D753	1SS133	SILICON ROHM	
	D754	1SS133	SILICON ROHM	
	D801	30DF2SFC	SILICON NIHONINTER	
	D802	30DF2SFC	SILICON NIHONINTER	
	D803	30DF2SFC	SILICON NIHONINTER	
	D804	30DF2SFC	SILICON NIHONINTER	
	D805	1SS133	SILICON ROHM	
	D806	MTZ16JC	ZENER ROHM	
	D807	1SS133	SILICON ROHM	
	D808	MTZ15JC	ZENER ROHM	
	D809	1SS133	SILICON ROHM	
	D810	MTZ16JC	ZENER ROHM	
	D811	1SS133	SILICON ROHM	
	D812	MTZ7.5JC	ZENER ROHM	
	D813	MTZ10JC	ZENER ROHM	
	D814	MTZ8.2JC	ZENER ROHM	
	D815	MTZ8.2JC	ZENER ROHM	
	D816	MTZ16JC	ZENER ROHM	
	D817	MTZ16JC	ZENER ROHM	
	D820	1SS133	SILICON ROHM	
	D821	MTZ12JC	ZENER ROHM	
	D822	MTZ10JC	ZENER ROHM	
	D823	MTZ12JC	ZENER ROHM	
	D824	MTZ12JC	ZENER ROHM	
⚠	D851	ERA15-02L19	SILICON KYOUDOU	
⚠	D852	ERA15-02L19	SILICON KYOUDOU	
⚠	D853	ERA15-02L19	SILICON KYOUDOU	
⚠	D854	ERA15-02L19	SILICON KYOUDOU	
	D857	MTZ6.2JC	ZENER ROHM	
	D858	1SS133	SILICON ROHM	
	D901	1SS133	SILICON ROHM	
	D902	1SS133	SILICON ROHM	
	D903	1SS133	SILICON ROHM	
	D904	1SS133	SILICON ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	C001	QCZ9019-472	4700PF CERAMIC	
	C701	QETB1HM-106	10MF 50V ELECTRO	
	C702	QETB1HM-106	10MF 50V ELECTRO	
	C703	QETB1AM-107	100MF 10V ELECTRO	
	C704	QETB1AM-107	100MF 10V ELECTRO	
	C707	QCS21HJ-270	27PF 50V CERAMIC	
	C708	QCS21HJ-270	27PF 50V CERAMIC	
	C709	QCS21HJ-150	15PF 50V CERAMIC	
	C710	QCS21HJ-150	15PF 50V CERAMIC	
	C711	QFN81HK-103	0.01MF 50V MYLAR	
	C712	QFN81HK-103	0.01MF 50V MYLAR	
	C717	QETB1HM-226	22MF 50V ELECTRO	
	C718	QETB1HM-226	22MF 50V ELECTRO	
	C721	QETB1EM-476	47MF 25V ELECTRO	
	C722	QETB1JM-476	47MF 63V ELECTRO	
	C729	QCS21HJ-220	22PF 50V CERAMIC	
	C730	QCS21HJ-220	22PF 50V CERAMIC	
	C751	QCS22HJ-470A	47PF 500V CERAMIC	
	C752	QCS22HJ-470A	47PF 500V CERAMIC	
	C753	QCS22HJ-470A	47PF 500V CERAMIC	
	C754	QCS22HJ-470A	47PF 500V CERAMIC	
	C755	QFN81HK-473	0.047MF 50V MYLAR	
	C756	QFN81HK-473	0.047MF 50V MYLAR	
	C757	QFN81HK-473	0.047MF 50V MYLAR	
	C758	QFN81HK-473	0.047MF 50V MYLAR	
	C761	QCF21HP-473	0.047MF 50V CERAMIC	
	C762	QCF21HP-473	0.047MF 50V CERAMIC	
	C763	QCF21HP-473	0.047MF 50V CERAMIC	
	C764	QCF21HP-473	0.047MF 50V CERAMIC	
	C801	EEW5608-878E	8700MF ELECTRO	
	C802	EEW5608-878E	8700MF ELECTRO	
	C805	QFN82CK-104	0.1MF 160V MYLAR	
	C806	QCE22HP-103	0.01MF 500V CERAMIC	
	C807	QCE22HP-103	0.01MF 500V CERAMIC	
	C811	QCF21HP-472	4700PF 50V CERAMIC	
	C812	QETB1EM-107	100MF 25V ELECTRO	
	C813	QCF21HP-472	4700PF 50V CERAMIC	
	C814	QETB1VM-107	100MF 35V ELECTRO	
	C816	QCF21HP-472	4700PF 50V CERAMIC	
	C817	QETB1EM-107	100MF 25V ELECTRO	
	C818	QETB1HM-476	47MF 50V ELECTRO	
	C819	QETB1HM-107	100MF 50V ELECTRO	
	C820	QCF21HP-472	4700PF 50V CERAMIC	
	C821	QETB1EM-107	100MF 25V ELECTRO	
	C822	QCF21HP-472	4700PF 50V CERAMIC	
	C823	QETB1EM-107	100MF 25V ELECTRO	
	C831	QFN81HK-223	0.022MF 50V MYLAR	
	C832	QFN81HK-223	0.022MF 50V MYLAR	
	C851	QFN32AK-223	0.022MF 100V MYLAR	
	C852	QETB1EM-477	470MF 25V ELECTRO	
	C855	QETB1CM-476	47MF 16V ELECTRO	
	C856	QCF21HP-472	4700PF 50V CERAMIC	
	C901	QCF21HP-223	0.022MF 50V CERAMIC	
	C902	QCF21HP-223	0.022MF 50V CERAMIC	
	C903	QETB1HM-226	22MF 50V ELECTRO	
	C904	QFN81HK-223	0.022MF 50V MYLAR	
	C905	QCY21HK-102	1000PF 50V CERAMIC	
	C906	QETB1AM-476	47MF 10V ELECTRO	
	C909	QETB1CM-226	22MF 16V ELECTRO	
	C910	QETB1HM-225	2.2MF 50V ELECTRO	
	C944	QCF21HP-103	0.01MF 50V CERAMIC	
	C961	QFN81HK-473	0.047MF 50V MYLAR	
	C962	QFN81HK-473	0.047MF 50V MYLAR	
	C963	QFN81HK-473	0.047MF 50V MYLAR	
	C964	QFN81HK-473	0.047MF 50V MYLAR	
	C965	QCS21HJ-101	100PF 50V CERAMIC	
	C966	QCS21HJ-101	100PF 50V CERAMIC	
	C967	QCS21HJ-101	100PF 50V CERAMIC	
	C968	QCS21HJ-101	100PF 50V CERAMIC	
	C969	QCBB1HK-101Y	100PF 50V CERAMIC	
	C972	QCS21HJ-271	270PF 50V CERAMIC	
	C973	QCS21HJ-101	100PF 50V CERAMIC	
	C974	QCS21HJ-101	100PF 50V CERAMIC	
	C991	QCF21HP-103	0.01MF 50V CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R701	QRD167J-222	2.2K 1/6W CARBON	
	R702	QRD167J-222	2.2K 1/6W CARBON	
	R703	QRD167J-104	100K 1/6W CARBON	
	R704	QRD167J-104	100K 1/6W CARBON	
	R705	QRD167J-472	4.7K 1/6W CARBON	
	R706	QRD167J-472	4.7K 1/6W CARBON	
⚠	R707	QRD14CJ-820S	82 1/4W UNF.CARBON	
⚠	R708	QRD14CJ-820S	82 1/4W UNF.CARBON	
⚠	R709	QRD14CJ-820S	82 1/4W UNF.CARBON	
⚠	R710	QRD14CJ-820S	82 1/4W UNF.CARBON	
	R711	QRD167J-470	47 1/6W CARBON	
	R712	QRD167J-470	47 1/6W CARBON	
	R713	QRD167J-153	15K 1/6W CARBON	
	R714	QRD167J-153	15K 1/6W CARBON	
	R715	QRD167J-153	15K 1/6W CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R716	QRD167J-153	15K 1/6W CARBON	
	R717	QRD167J-332	3.3K 1/6W CARBON	
	R718	QRD167J-332	3.3K 1/6W CARBON	
⚠	R719	QRV144F-1003	100K 1/4W M.FILM	
⚠	R720	QRV144F-1003	100K 1/4W M.FILM	
⚠	R723	QRV144F-1301A	1.3K 1/4W M.FILM	
⚠	R724	QRV144F-1301A	1.3K 1/4W M.FILM	
	R725	QRD167J-202	2K 1/6W CARBON	
	R726	QRD167J-223	22K 1/6W CARBON	
⚠	R727	QRD14CJ-102S	1K 1/4W UNF.CARBON	
	R728	QRD167J-102	1K 1/6W CARBON	
	R751	QVPE601-501	500 0.15W VARIABLE	
	R752	QVPE601-501	500 0.15W VARIABLE	
	R753	QRD167J-152	1.5K 1/6W CARBON	
	R754	QRD167J-152	1.5K 1/6W CARBON	
	R755	QRD167J-391	390 1/6W CARBON	
	R756	QRD167J-391	390 1/6W CARBON	
	R757	SDT250	THERMISTOR	
	R758	SDT250	THERMISTOR	
⚠	R759	QRD14CJ-100S	10 1/4W UNF.CARBON	
⚠	R760	QRD14CJ-100S	10 1/4W UNF.CARBON	
⚠	R761	QRD14CJ-100S	10 1/4W UNF.CARBON	
⚠	R762	QRD14CJ-100S	10 1/4W UNF.CARBON	
⚠	R763	QRD14CJ-100S	10 1/4W UNF.CARBON	
⚠	R764	QRD14CJ-100S	10 1/4W UNF.CARBON	
⚠	R765	QRD14CJ-100S	10 1/4W UNF.CARBON	
⚠	R766	QRD14CJ-100S	10 1/4W UNF.CARBON	
	R767	QRD167J-820	82 1/6W CARBON	
	R768	QRD167J-820	82 1/6W CARBON	
	R769	QRD167J-820	82 1/6W CARBON	
	R770	QRD167J-820	82 1/6W CARBON	
	R771	QRD167J-151	150 1/6W CARBON	
	R772	QRD167J-151	150 1/6W CARBON	
	R773	QRD167J-151	150 1/6W CARBON	
	R774	QRD167J-151	150 1/6W CARBON	
⚠	R783	QRD14CJ-272S	2.7K 1/4W UNF.CARBON	
⚠	R784	QRD14CJ-272S	2.7K 1/4W UNF.CARBON	
⚠	R785	QRD14CJ-271S	270 1/4W UNF.CARBON	
⚠	R786	QRD14CJ-271S	270 1/4W UNF.CARBON	
⚠	R787	ERF032K-R22	0.22 3W CEMENT	
⚠	R788	ERF032K-R22	0.22 3W CEMENT	
⚠	R789	QRZ0077-100	10 1/4W FUSIBLE	
⚠	R790	QRZ0077-100	10 1/4W FUSIBLE	
⚠	R791	QRZ0077-100	10 1/4W FUSIBLE	
⚠	R792	QRZ0077-100	10 1/4W FUSIBLE	
⚠	R793	QRD125J-330	33 1/2W UNF.CARBON	
⚠	R794	QRD125J-330	33 1/2W UNF.CARBON	
⚠	R795	QRG022J-100A	10 2W O.M.FILM	
⚠	R796	QRG022J-100A	10 2W O.M.FILM	
⚠	R797	QRZ0077-330	33 1/4W FUSIBLE	
⚠	R798	QRZ0077-330	33 1/4W FUSIBLE	
⚠	R801	QRG022J-561A	560 2W O.M.FILM	
⚠	R802	QRG022J-561A	560 2W O.M.FILM	
⚠	R803	QRZ0077-220	22 1/4W FUSIBLE	
⚠	R804	QRD125J-562	5.6K 1/2W UNF.CARBON	
⚠	R805	QRD125J-272	2.7K 1/2W UNF.CARBON	
⚠	R806	QRD14CJ-121S	120 1/4W UNF.CARBON	
⚠	R807	QRG022J-561A	560 2W O.M.FILM	
	R808	QRD167J-220	22 1/6W CARBON	
	R809	QRD167J-220	22 1/6W CARBON	
⚠	R810	QRG022J-561A	560 2W O.M.FILM	
⚠	R811	QRD125J-562	5.6K 1/2W UNF.CARBON	
⚠	R812	QRG022J-391A	390 2W O.M.FILM	
⚠	R813	QRG022J-391A	390 2W O.M.FILM	
⚠	R814	QRG022J-391A	390 2W O.M.FILM	
⚠	R816	QRD125J-562	5.6K 1/2W UNF.CARBON	
	R817	QRG026J-102AF	1K 2W O.M.FILM	
	R818	QRG026J-102AF	1K 2W O.M.FILM	
	R819	QRG026J-102AF	1K 2W O.M.FILM	
⚠	R820	QRD125J-822	8.2K 1/2W UNF.CARBON	
	R841	QRD167J-104	100K 1/6W CARBON	
	R842	QRD167J-104	100K 1/6W CARBON	
⚠	R843	QRD125J-2R2	2.2 1/2W UNF.CARBON	
⚠	R844	QRD125J-2R2	2.2 1/2W UNF.CARBON	
⚠	R861	QRZ0077-220	22 1/4W FUSIBLE	
⚠	R863	QRV144F-8200	1/4W M.FILM	
	R901	QRD167J-681	680 1/6W CARBON	
	R902	QRD167J-681	680 1/6W CARBON	
	R903	QRD167J-562	5.6K 1/6W CARBON	
	R904	QRD167J-562	5.6K 1/6W CARBON	
	R905	QRD167J-123	12K 1/6W CARBON	
	R906	QRD167J-123	12K 1/6W CARBON	
	R907	QRD167J-152	1.5K 1/6W CARBON	
	R908	QRD167J-152	1.5K 1/6W CARBON	
	R909	QRD167J-103	10K 1/6W CARBON	
	R911	QRD167J-332	3.3K 1/6W CARBON	
	R912	QRD167J-473	47K 1/6W CARBON	
	R913	QRD167J-104	100K 1/6W CARBON	
	R914	QRD167J-823	82K 1/6W CARBON	
	R915	QRD167J-473	47K 1/6W CARBON	
	R916	QRD167J-563	56K 1/6W CARBON	
	R917	QRD167J-683	68K 1/6W CARBON	
	R918	QRD167J-392	3.9K 1/6W CARBON	
	R921	QRD167J-224	220K 1/6W CARBON	
	R922	QRD167J-182	1.8K 1/6W CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	R924	QRG022J-122A	1.2K 2W O.M.FILM	
	R925	QRD167J-121	120 1/6W CARBON	
⚠	R931	QRD14CJ-330S	33 1/4W UNF.CARBON	
	R935	QRD167J-562	5.6K 1/6W CARBON	
	R936	QRD167J-822	8.2K 1/6W CARBON	
	R937	QRD167J-103	10K 1/6W CARBON	
⚠	R941	QRG022J-471A	470 2W O.M.FILM	
⚠	R942	QRG022J-471A	470 2W O.M.FILM	
⚠	R961	QRZ0077-100	10 1/4W FUSIBLE	
⚠	R962	QRZ0077-100	10 1/4W FUSIBLE	
⚠	R963	QRZ0077-100	10 1/4W FUSIBLE	
⚠	R964	QRZ0077-100	10 1/4W FUSIBLE	

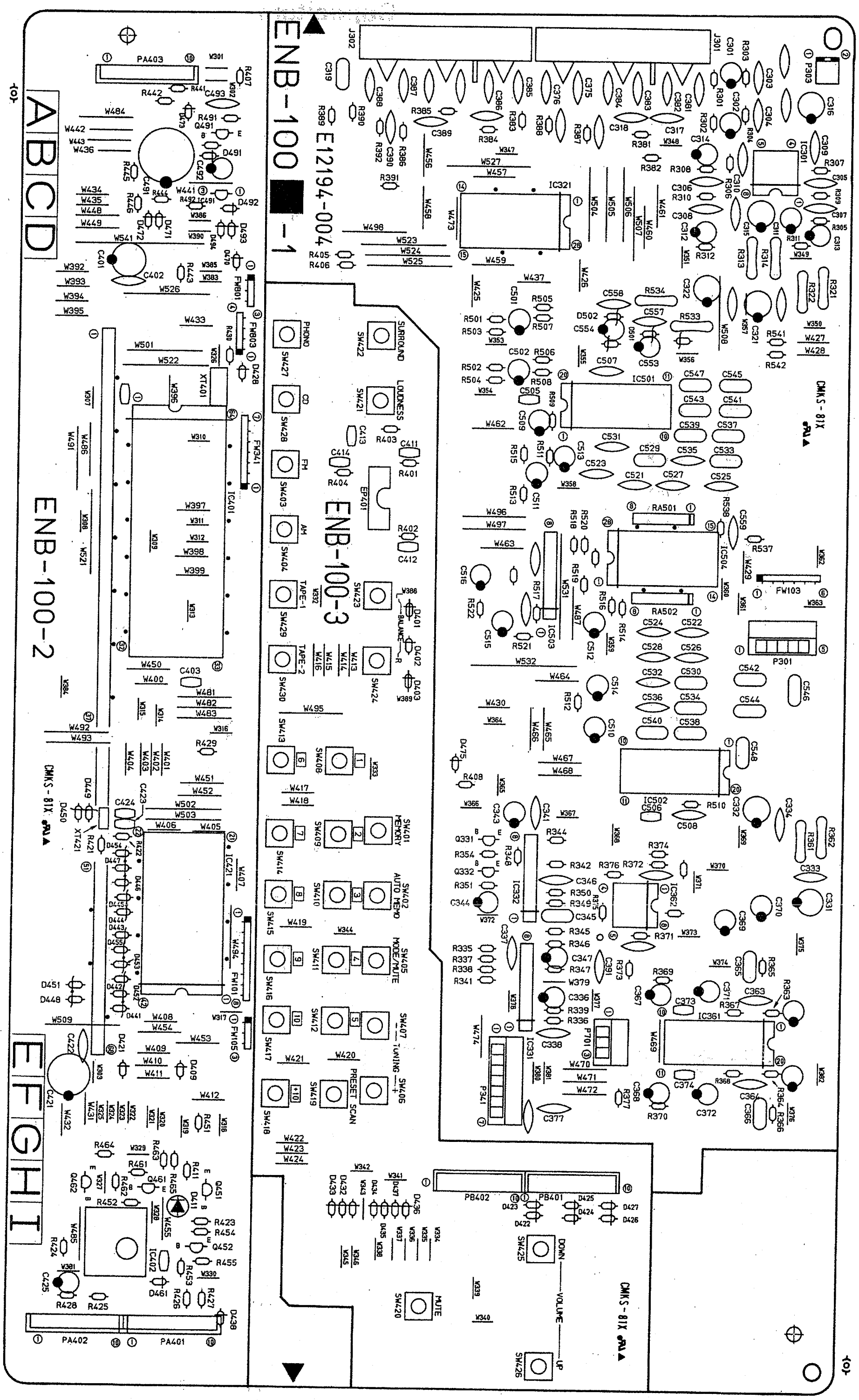
⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB90TV-801A	SPEAKER TERMINAL	
		EMG7331-001	FUSE CLIP	
⚠		ETP1000-41EA	POWER TRANSFORMER	
		E12192-005	**CIRCUIT BOARD**	
		E305747-001	BRACKET	
		E305748-002	BRACKET	
		E306674-001	HEAT SINK	
		E65508-002	TAB	
		E65654-001	SPACER	
		E67132-T2R0	FUSE LABEL	
		E67764-102	WRAPPING TERMINAL	
		E67764-103	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	
		E70225-002	EARTH PLATE	
		E70859-001	EARTH PLATE	
		E73525-003	SCREW	
		SBSG3008CC	SCREW	
	J901	QMS6A40-021	HEADPHONE JACK	
	L961	EQL0001-R45	INDUCTOR	
	L962	EQL0001-R45	INDUCTOR	
	P801	VMC0107-003	CONNECTOR	
	P803	VMC0107-004	CONNECTOR	
	P805	VMC0107-003	CONNECTOR	
	P806	VMC0107-003	CONNECTOR	
	EP801	E70859-001	EARTH PLATE	
	EP802	E70859-001	EARTH PLATE	
	FW301	EWR35B-25LST	FLAT WIRE	
	FW701	EWR23C-30JN	FLAT WIRE	
	FW805	EWR33B-20LST	FLAT WIRE	
	FW806	EWR33B-20LST	FLAT WIRE	
	FW901	EWR33B-20SST	FLAT WIRE	
	FW902	EWR34B-25SST	FLAT WIRE	
	FW903	EWR36B-35SST	FLAT WIRE	
⚠	RY001	ESK1D12-115	RELAY	
	RY901	ESK5D24-218	RELAY	
	SW901	QST4231-E01	PUSH SWITCH	
	SW902	QST4231-E01	PUSH SWITCH	

⚠ : SAFETY PARTS

■ENB-100Ⓔ Source Selector and SEA PC Board Ass'y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XT401
XT421
FW103
SW422 SURROUND
SW427 PHONO
SW421 LOUDNESS
SW428 CD
SW403 FM
SW404 AM
SW423
SW429 TAPE-1
SW430 TAPE-2
SW424
BALANCE
SW413
SW408
SW401 MEMORY
SW409
SW414
SW410
SW402 AUTO MEMO
SW415
SW411
SW405 MODE/MUTE
SW416
SW412
SW407 TUNING
SW417
SW406 PRESET SCAN
SW418
SW419
SW425 DOWN
VOLUME
SW426 UP
SW420 MUTE
DMKS-81X

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q331	DTC144ES	SILICON ROHM	
	Q332	2SD655(D,E)	SILICON HITACHI	
	Q451	2SC458(C,D)	SILICON HITACHI	
	Q452	2SC458(C,D)	SILICON HITACHI	
	Q461	2SC458(C,D)	SILICON HITACHI	
	Q462	2SC458(C,D)	SILICON HITACHI	
	Q491	DTC114YS	SILICON ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC301	VC4580DD	I.C. DAINICHI	
	IC321	TC9164N	I.C. TOSHIBA	
	IC331	VC4580L	I.C. DAINICHI	
	IC332	VC4580L	I.C. DAINICHI	
	IC361	TC9177P	I.C. TOSHIBA	
	IC362	NJM4560DD	I.C. DAINICHI	
	IC401	MN178122JNE	I.C. MATSUSHITA	
	IC402	GP1U501X	I.C. SHARP	
	IC421	LC6514B-4131	I.C. SANYO	
	IC491	MN1281(P,Q)	I.C. MATSUSHITA	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC501	LA3607S	I.C. SANYO	
	IC502	LA3607S	I.C. SANYO	
	IC503	VC4580LD	I.C. DAINICHI	
	IC504	LC7522	I.C. SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D402	1SS133	SILICON ROHM	
	D409	1SS133	SILICON ROHM	
	D411	SLH-34VC50F	L.E.D. ROHM	
	D421	1SS133	SILICON ROHM	
	D422	1SS133	SILICON ROHM	
	D423	1SS133	SILICON ROHM	
	D424	1SS133	SILICON ROHM	
	D425	1SS133	SILICON ROHM	
	D426	1SS133	SILICON ROHM	
	D427	1SS133	SILICON ROHM	
	D428	1SS133	SILICON ROHM	
	D432	1SS133	SILICON ROHM	
	D433	1SS133	SILICON ROHM	
	D436	1SS133	SILICON ROHM	
	D441	MTZ3.3JB	ZENER ROHM	
	D442	MTZ3.3JB	ZENER ROHM	
	D443	MTZ3.3JB	ZENER ROHM	
	D444	MTZ3.3JB	ZENER ROHM	
	D445	MTZ3.3JB	ZENER ROHM	
	D446	MTZ3.3JB	ZENER ROHM	
	D447	MTZ3.3JB	ZENER ROHM	
	D448	MTZ3.3JB	ZENER ROHM	
	D449	MTZ3.3JB	ZENER ROHM	
	D450	MTZ3.3JB	ZENER ROHM	
	D451	MTZ3.3JB	ZENER ROHM	
	D452	MTZ3.3JB	ZENER ROHM	
	D453	MTZ3.3JB	ZENER ROHM	
	D454	MTZ3.3JB	ZENER ROHM	
	D455	MTZ3.3JB	ZENER ROHM	
	D461	1SS133	SILICON ROHM	
	D470	1SS133	SILICON ROHM	
	D471	1SS133	SILICON ROHM	
	D472	1SS133	SILICON ROHM	
	D473	1SS133	SILICON ROHM	
	D475	1SS133	SILICON ROHM	
	D491	1SS133	SILICON ROHM	
	D492	1SS133	SILICON ROHM	
	D493	1SS133	SILICON ROHM	
	D494	1SS133	SILICON ROHM	
	D501	MTZ6.8JC	ZENER ROHM	
	D502	MTZ6.8JC	ZENER ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C301	QETB1HM-475	4.7MF 50V ELECTRO	
	C302	QETB1HM-475	4.7MF 50V ELECTRO	
	C303	QCS21HJ-471	470PF 50V CERAMIC	
	C304	QCS21HJ-471	470PF 50V CERAMIC	
	C305	QCY21HK-182	1800PF 50V CERAMIC	
	C306	QCY21HK-182	1800PF 50V CERAMIC	
	C307	QCY21HK-682	6800PF 50V CERAMIC	
	C308	QCY21HK-682	6800PF 50V CERAMIC	
	C309	QCY21HK-101	100PF 50V CERAMIC	
	C310	QCY21HK-101	100PF 50V CERAMIC	
	C311	QETB1HM-475	4.7MF 50V ELECTRO	
	C312	QETB1HM-475	4.7MF 50V ELECTRO	
	C313	QETB1AM-107	100MF 10V ELECTRO	
	C314	QETB1AM-107	100MF 10V ELECTRO	
	C315	QETB1CM-476	47MF 16V ELECTRO	
	C316	QETB1CM-476	47MF 16V ELECTRO	
	C317	QCF21HP-223	0.022MF 50V CERAMIC	
	C318	QCF21HP-223	0.022MF 50V CERAMIC	
	C319	QFN81HK-104	0.1MF 50V MYLAR	
	C321	QETB1EM-476	47MF 25V ELECTRO	
	C322	QETB1EM-476	47MF 25V ELECTRO	
	C331	QETB1EM-476	47MF 25V ELECTRO	
	C332	QETB1EM-476	47MF 25V ELECTRO	
	C333	QCF21HP-223	0.022MF 50V CERAMIC	
	C334	QCF21HP-223	0.022MF 50V CERAMIC	
	C336	QETB1CM-226	22MF 16V ELECTRO	
	C337	QCS21HJ-101	100PF 50V CERAMIC	
	C338	QCS21HJ-101	100PF 50V CERAMIC	
	C341	QCS21HJ-101	100PF 50V CERAMIC	
	C343	QETB1HM-475	4.7MF 50V ELECTRO	
	C344	QETB1HM-105	1MF 50V ELECTRO	
	C345	QFN81HJ-392	3900PF 50V MYLAR	
	C346	QCS21HJ-100	10PF 50V CERAMIC	
	C347	QETB1EM-226	22MF 25V ELECTRO	
	C363	QCS21HJ-181	180PF 50V CERAMIC	
	C364	QCS21HJ-181	180PF 50V CERAMIC	
	C365	QFN81HK-333	0.033MF 50V MYLAR	
	C366	QFN81HK-333	0.033MF 50V MYLAR	
	C367	QETB1HM-475	4.7MF 50V ELECTRO	
	C368	QETB1HM-475	4.7MF 50V ELECTRO	
	C369	QETB1HM-105	1MF 50V ELECTRO	
	C370	QETB1HM-105	1MF 50V ELECTRO	
	C371	QETB1EM-106	10MF 25V ELECTRO	
	C372	QETB1EM-106	10MF 25V ELECTRO	
	C373	QCBB1HK-101Y	100PF 50V CERAMIC	
	C374	QCBB1HK-101Y	100PF 50V CERAMIC	
	C375	QCS21HJ-331	330PF 50V CERAMIC	
	C376	QCS21HJ-331	330PF 50V CERAMIC	
	C377	QCS21HJ-561	560PF 50V CERAMIC	
	C381	QCS21HJ-331	330PF 50V CERAMIC	
	C382	QCS21HJ-331	330PF 50V CERAMIC	
	C383	QCS21HJ-331	330PF 50V CERAMIC	
	C384	QCS21HJ-331	330PF 50V CERAMIC	
	C385	QCS21HJ-331	330PF 50V CERAMIC	
	C386	QCS21HJ-331	330PF 50V CERAMIC	
	C387	QCS21HJ-561	560PF 50V CERAMIC	
	C388	QCS21HJ-561	560PF 50V CERAMIC	
	C389	QCS21HJ-221	220PF 50V CERAMIC	
	C390	QCS21HJ-221	220PF 50V CERAMIC	
	C401	EET0602-477T	470MF ELECTRO	
	C402	QCZ0205-155	1.5MF 25V CERAMIC	
	C403	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C411	QCGB1HK-102	1000PF 50V CERAMIC	
	C412	QCGB1HK-102	1000PF 50V CERAMIC	
	C413	QCGB1HK-102	1000PF 50V CERAMIC	
	C414	QCGB1HK-102	1000PF 50V CERAMIC	
	C421	EEZ0601-108	1000MF ELECTRO	
	C422	QCZ0205-155	1.5MF 25V CERAMIC	
	C423	QCBB1HK-101	100PF 50V CERAMIC	
	C424	QCBB1HK-101	100PF 50V CERAMIC	
	C425	QETB1HM-475	4.7MF 50V ELECTRO	
	C491	EEZ0502-479	47000MF 5.5V ELECTRO	
	C492	QETB1HM-225	2.2MF 50V ELECTRO	
	C493	QCF21HP-223	0.022MF 50V CERAMIC	
	C501	QETB1HM-475	4.7MF 50V ELECTRO	
	C502	QETB1HM-475	4.7MF 50V ELECTRO	
	C507	QCS21HJ-101	100PF 50V CERAMIC	
	C508	QCS21HJ-101	100PF 50V CERAMIC	
	C509	QETB1CM-226	22MF 16V ELECTRO	
	C510	QETB1CM-226	22MF 16V ELECTRO	
	C511	QETB1HM-475	4.7MF 50V ELECTRO	
	C512	QETB1HM-475	4.7MF 50V ELECTRO	
	C513	QETB1HM-475	4.7MF 50V ELECTRO	
	C514	QETB1HM-475	4.7MF 50V ELECTRO	
	C515	QETB1CM-226	22MF 16V ELECTRO	
	C516	QETB1CM-226	22MF 16V ELECTRO	
	C521	QCY21HK-272	2700PF 50V CERAMIC	
	C522	QCY21HK-272	2700PF 50V CERAMIC	
	C523	QCS21HJ-471	470PF 50V CERAMIC	
	C524	QCS21HJ-471	470PF 50V CERAMIC	
	C525	QCY21HK-682	6800PF 50V CERAMIC	
	C526	QCY21HK-682	6800PF 50V CERAMIC	
	C527	QCY21HK-122	1200PF 50V CERAMIC	
	C528	QCY21HK-122	1200PF 50V CERAMIC	
	C529	QFN81HK-183	0.018MF 50V MYLAR	
	C530	QFN81HK-183	0.018MF 50V MYLAR	
	C531	QCY21HK-272	2700PF 50V CERAMIC	
	C532	QCY21HK-272	2700PF 50V CERAMIC	
	C533	QFN81HK-473	0.047MF 50V MYLAR	
	C534	QFN81HK-473	0.047MF 50V MYLAR	
	C535	QCY21HK-682	6800PF 50V CERAMIC	
	C536	QCY21HK-682	6800PF 50V CERAMIC	
	C537	QFN81HK-104	0.1MF 50V MYLAR	
	C538	QFN81HK-104	0.1MF 50V MYLAR	
	C539	QFN81HK-183	0.018MF 50V MYLAR	
	C540	QFN81HK-183	0.018MF 50V MYLAR	
	C541	QFV81HJ-274	0.27MF 50V T.FILM	
	C542	QFV81HJ-274	0.27MF 50V T.FILM	
	C543	QFN81HK-473	0.047MF 50V MYLAR	
	C544	QFN81HK-473	0.047MF 50V MYLAR	
	C545	QFV81HJ-684	0.68MF 50V T.FILM	
	C546	QFV81HJ-684	0.68MF 50V T.FILM	
	C547	QFN81HJ-124	0.12MF 50V MYLAR	
	C548	QFN81HJ-124	0.12MF 50V MYLAR	
	C553	QETB1HM-475	4.7MF 50V ELECTRO	
	C554	QETB1HM-475	4.7MF 50V ELECTRO	
	C557	QCF21HP-223	0.022MF 50V CERAMIC	
	C558	QCF21HP-223	0.022MF 50V CERAMIC	
	C559	QCF21HP-223	0.022MF 50V CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R301	QRD167J-222	2.2K 1/6W CARBON	
	R302	QRD167J-222	2.2K 1/6W CARBON	
	R303	QRD167J-473	47K 1/6W CARBON	
	R304	QRD167J-473	47K 1/6W CARBON	
	R305	QRD167J-621	620 1/6W CARBON	
	R306	QRD167J-621	620 1/6W CARBON	
	R307	QRD167J-393	39K 1/6W CARBON	
	R308	QRD167J-393	39K 1/6W CARBON	
	R309	QRD167J-474	470K 1/6W CARBON	
	R310	QRD167J-474	470K 1/6W CARBON	
	R311	QRD167J-104	100K 1/6W CARBON	
	R312	QRD167J-104	100K 1/6W CARBON	
⚠	R313	QRD14CJ-391S	390 1/4W UNF.CARBON	
⚠	R314	QRD14CJ-391S	390 1/4W UNF.CARBON	
⚠	R321	QRZ0077-470	47 1/4W FUSIBLE	
⚠	R322	QRZ0077-470	47 1/4W FUSIBLE	
	R335	QRD167J-103	10K 1/6W CARBON	
	R336	QRD167J-103	10K 1/6W CARBON	
	R337	QRD167J-103	10K 1/6W CARBON	
	R338	QRD167J-154	150K 1/6W CARBON	
	R339	QRD167J-103	10K 1/6W CARBON	
	R341	QRD167J-103	10K 1/6W CARBON	
	R342	QRD167J-104	100K 1/6W CARBON	
	R344	QRD167J-104	100K 1/6W CARBON	
	R345	QRD167J-103	10K 1/6W CARBON	
	R346	QRD167J-103	10K 1/6W CARBON	
	R347	QRD167J-103	10K 1/6W CARBON	
	R348	QRD167J-104	100K 1/6W CARBON	
	R349	QRD167J-682	6.8K 1/6W CARBON	
	R350	QRD167J-104	100K 1/6W CARBON	
	R351	QRD167J-332	3.3K 1/6W CARBON	
	R354	QRD167J-473	47K 1/6W CARBON	
⚠	R361	QRZ0077-470	47 1/4W FUSIBLE	
⚠	R362	QRZ0077-470	47 1/4W FUSIBLE	
	R363	QRD167J-105	1M 1/6W CARBON	
	R364	QRD167J-105	1M 1/6W CARBON	
	R365	QRD167J-563	56K 1/6W CARBON	
	R366	QRD167J-563	56K 1/6W CARBON	
	R367	QRD167J-563	56K 1/6W CARBON	
	R368	QRD167J-563	56K 1/6W CARBON	
	R369	QRD167J-104	100K 1/6W CARBON	
	R370	QRD167J-104	100K 1/6W CARBON	
	R371	QRD167J-103	10K 1/6W CARBON	
	R372	QRD167J-103	10K 1/6W CARBON	
	R373	QRD167J-203	20K 1/6W CARBON	
	R374	QRD167J-203	20K 1/6W CARBON	
	R375	QRD167J-105	1M 1/6W CARBON	
	R376	QRD167J-105	1M 1/6W CARBON	
	R377	QRD167J-103	10K 1/6W CARBON	
	R381	QRD167J-471	470 1/6W CARBON	
	R382	QRD167J-471	470 1/6W CARBON	
	R383	QRD167J-471	470 1/6W CARBON	
	R384	QRD167J-471	470 1/6W CARBON	
	R385	QRD167J-222	2.2K 1/6W CARBON	
	R386	QRD167J-222	2.2K 1/6W CARBON	
	R387	QRD167J-222	2.2K 1/6W CARBON	
	R388	QRD167J-222	2.2K 1/6W CARBON	
	R389	QRD167J-471	470 1/6W CARBON	
	R390	QRD167J-471	470 1/6W CARBON	
	R391	QRD167J-105	1M 1/6W CARBON	
	R392	QRD167J-105	1M 1/6W CARBON	
	R401	QRD167J-473	47K 1/6W CARBON	
	R402	QRD167J-473	47K 1/6W CARBON	
	R403	QRD167J-473	47K 1/6W CARBON	
	R404	QRD167J-473	47K 1/6W CARBON	
	R405	QRD167J-473	47K 1/6W CARBON	
	R406	QRD167J-512	5.1K 1/6W CARBON	
	R407	QRD167J-473	47K 1/6W CARBON	
	R408	QRD167J-123	12K 1/6W CARBON	
	R411	QRD167J-271	270 1/6W CARBON	
	R421	QRD167J-105	1M 1/6W CARBON	
	R422	QRD167J-152	1.5K 1/6W CARBON	
	R423	QRD167J-103	10K 1/6W CARBON	
	R424	QRD167J-473	47K 1/6W CARBON	
	R425	QRD167J-473	47K 1/6W CARBON	
	R426	QRD167J-473	47K 1/6W CARBON	
	R427	QRD167J-473	47K 1/6W CARBON	
	R428	QRD167J-221	220 1/6W CARBON	
	R429	QRD167J-272	2.7K 1/6W CARBON	
	R430	QRD167J-220	22 1/6W CARBON	
	R441	QRD167J-562	5.6K 1/6W CARBON	
	R442	QRD167J-153	15K 1/6W CARBON	
	R443	QRD167J-273	27K 1/6W CARBON	
	R444	QRD167J-683	68K 1/6W CARBON	
	R445	QRD167J-512	5.1K 1/6W CARBON	
	R446	QRD167J-273	27K 1/6W CARBON	
	R451	QRD167J-103	10K 1/6W CARBON	
	R452	QRD167J-471	470 1/6W CARBON	
	R453	QRD167J-473	47K 1/6W CARBON	
	R454	QRD167J-223	22K 1/6W CARBON	
	R455	QRD167J-103	10K 1/6W CARBON	
	R461	QRD167J-103	10K 1/6W CARBON	
	R462	QRD167J-471	470 1/6W CARBON	
	R463	QRD167J-473	47K 1/6W CARBON	
	R464	QRD167J-223	22K 1/6W CARBON	
	R465	QRD167J-103	10K 1/6W CARBON	
	R491	QRD167J-473	47K 1/6W CARBON	
	R492	QRD167J-331	330 1/6W CARBON	
	R501	QRD167J-203	20K 1/6W CARBON	
	R502	QRD167J-203	20K 1/6W CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R503	QRD167J-154	150K 1/6W CARBON	
	R504	QRD167J-154	150K 1/6W CARBON	
	R505	QRD167J-184	180K 1/6W CARBON	
	R506	QRD167J-184	180K 1/6W CARBON	
	R507	QRD167J-102	1K 1/6W CARBON	
	R508	QRD167J-102	1K 1/6W CARBON	
	R509	QRD167J-103	10K 1/6W CARBON	
	R510	QRD167J-103	10K 1/6W CARBON	
	R511	QRD167J-103	10K 1/6W CARBON	
	R512	QRD167J-103	10K 1/6W CARBON	
	R513	QRD167J-224	220K 1/6W CARBON	
	R514	QRD167J-224	220K 1/6W CARBON	
	R515	QRD167J-154	150K 1/6W CARBON	
	R516	QRD167J-154	150K 1/6W CARBON	
	R517	QRD167J-682	6.8K 1/6W CARBON	
	R518	QRD167J-682	6.8K 1/6W CARBON	
	R519	QRD167J-103	10K 1/6W CARBON	
	R520	QRD167J-103	10K 1/6W CARBON	
	R521	QRD167J-104	100K 1/6W CARBON	
	R522	QRD167J-104	100K 1/6W CARBON	
⚠	R533	QRD14CJ-331S	330 1/4W UNF.CARBON	
⚠	R534	QRD14CJ-391S	390 1/4W UNF.CARBON	
	R537	QRD167J-681	680 1/6W CARBON	
	R538	QRD167J-272	2.7K 1/6W CARBON	
	R541	QRD167J-270	27 1/6W CARBON	
	R542	QRD167J-100	10 1/6W CARBON	
	RA501	QRB079J-474	470K 1/10W R.NETWORK	
	RA502	QRB079J-474	470K 1/10W R.NETWORK	

⚠ : SAFETY PARTS

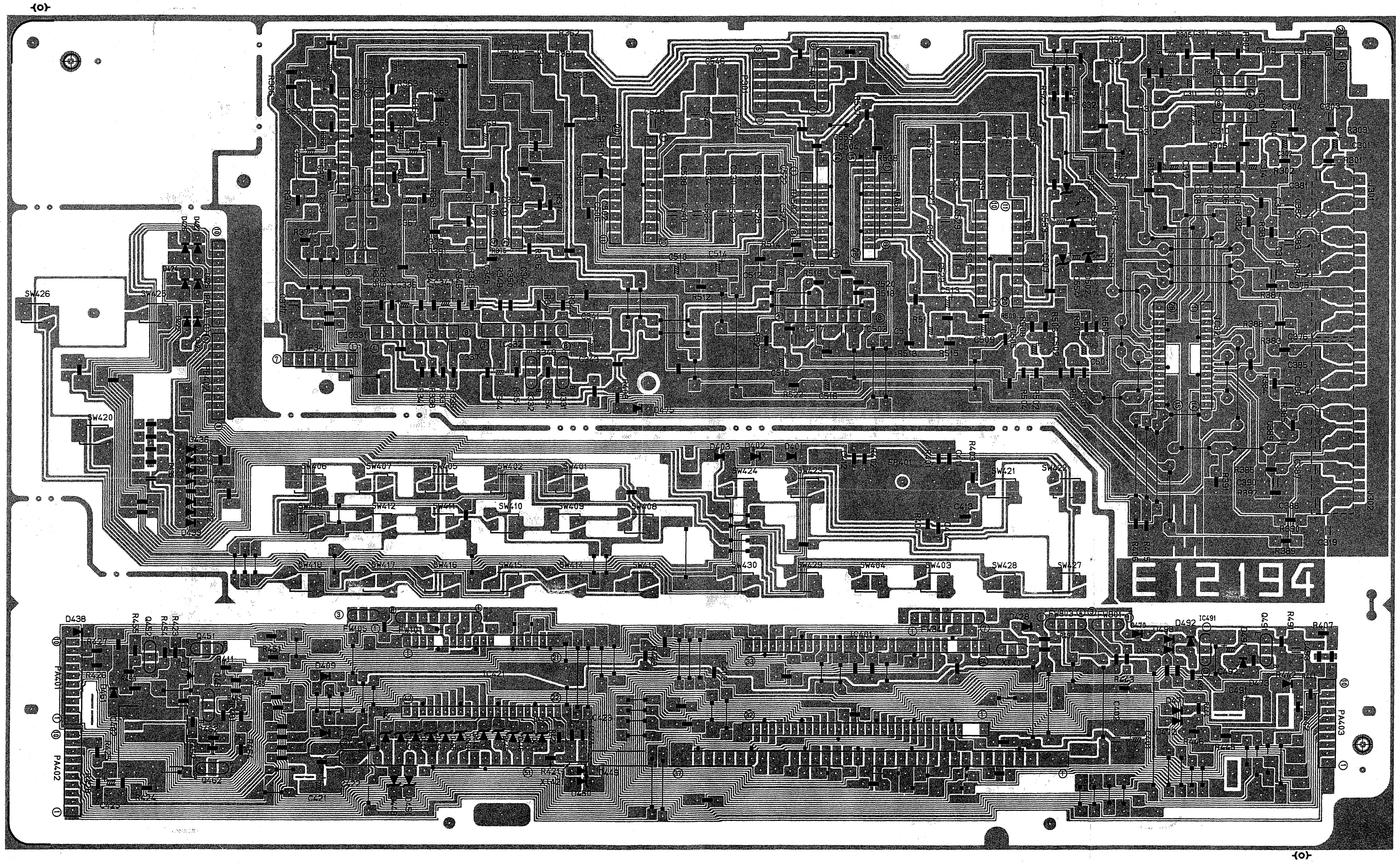
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E12194-004	CIRCUIT BOARD	
		E306692-001	HOLDER	
		E3400-444	FELT SPACER	
	J301	EMN00TV-604A	6P PIN JACK	
	J302	EMN00TV-604A	6P PIN JACK	
	P301	VMC0107-005	CONNECTOR	
	P303	QMV5005-002K	PLUG ASSY	
	P341	VMC0107-007	SOCKET	
	P701	VMC0107-003	CONNECTOR	
	EP401	E70859-001	EARTH PLATE	
	FL401	ELU0001-097	FL TUBE	
	FW101	EWR38B-25LST	FLAT WIRE	
	FW103	EWR36B-25LST	FLAT WIRE	
	FW341	EWR37B-35LST	FLAT WIRE	
	FW801	EWR33B-45LST	FLAT WIRE	
	FW803	EWR34B-25LST	FLAT WIRE	
	PA401	E75899-001	CONNECTOR	
	PA402	E75899-001	CONNECTOR	
	PA403	E75899-001	CONNECTOR	
	PB401	EMV7124-010	CONNECTOR	
	PB402	EMV7124-010	CONNECTOR	
	SW401	ESP0001-018	TACT SWITCH	
	SW402	ESP0001-018	TACT SWITCH	
	SW403	ESP0001-018	TACT SWITCH	
	SW404	ESP0001-018	TACT SWITCH	
	SW405	ESP0001-018	TACT SWITCH	
	SW406	ESP0001-018	TACT SWITCH	
	SW407	ESP0001-018	TACT SWITCH	
	SW408	ESP0001-018	TACT SWITCH	
	SW409	ESP0001-018	TACT SWITCH	
	SW410	ESP0001-018	TACT SWITCH	
	SW411	ESP0001-018	TACT SWITCH	
	SW412	ESP0001-018	TACT SWITCH	
	SW413	ESP0001-018	TACT SWITCH	
	SW414	ESP0001-018	TACT SWITCH	
	SW415	ESP0001-018	TACT SWITCH	
	SW416	ESP0001-018	TACT SWITCH	
	SW417	ESP0001-018	TACT SWITCH	
	SW418	ESP0001-018	TACT SWITCH	
	SW419	ESP0001-018	TACT SWITCH	
	SW420	ESP0001-018	TACT SWITCH	
	SW421	ESP0001-018	TACT SWITCH	
	SW422	ESP0001-018	TACT SWITCH	
	SW423	ESP0001-018	TACT SWITCH	
	SW424	ESP0001-018	TACT SWITCH	
	SW425	ESP0001-018	TACT SWITCH	
	SW426	ESP0001-018	TACT SWITCH	
	SW427	ESP0001-018	TACT SWITCH	
	SW428	ESP0001-018	TACT SWITCH	
	SW429	ESP0001-018	TACT SWITCH	
	SW430	ESP0001-018	TACT SWITCH	
	XT401	ECX0072-000EM	RESONATOR	
	XT421	ECX0001-000KS	RESONATOR	

⚠ : SAFETY PARTS

Printed Circuit Boards

(1) Source Selector & SEA PC Board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SW426
SW420
SW406
SW407
SW405
SW402
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SW411
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SW409
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SW424
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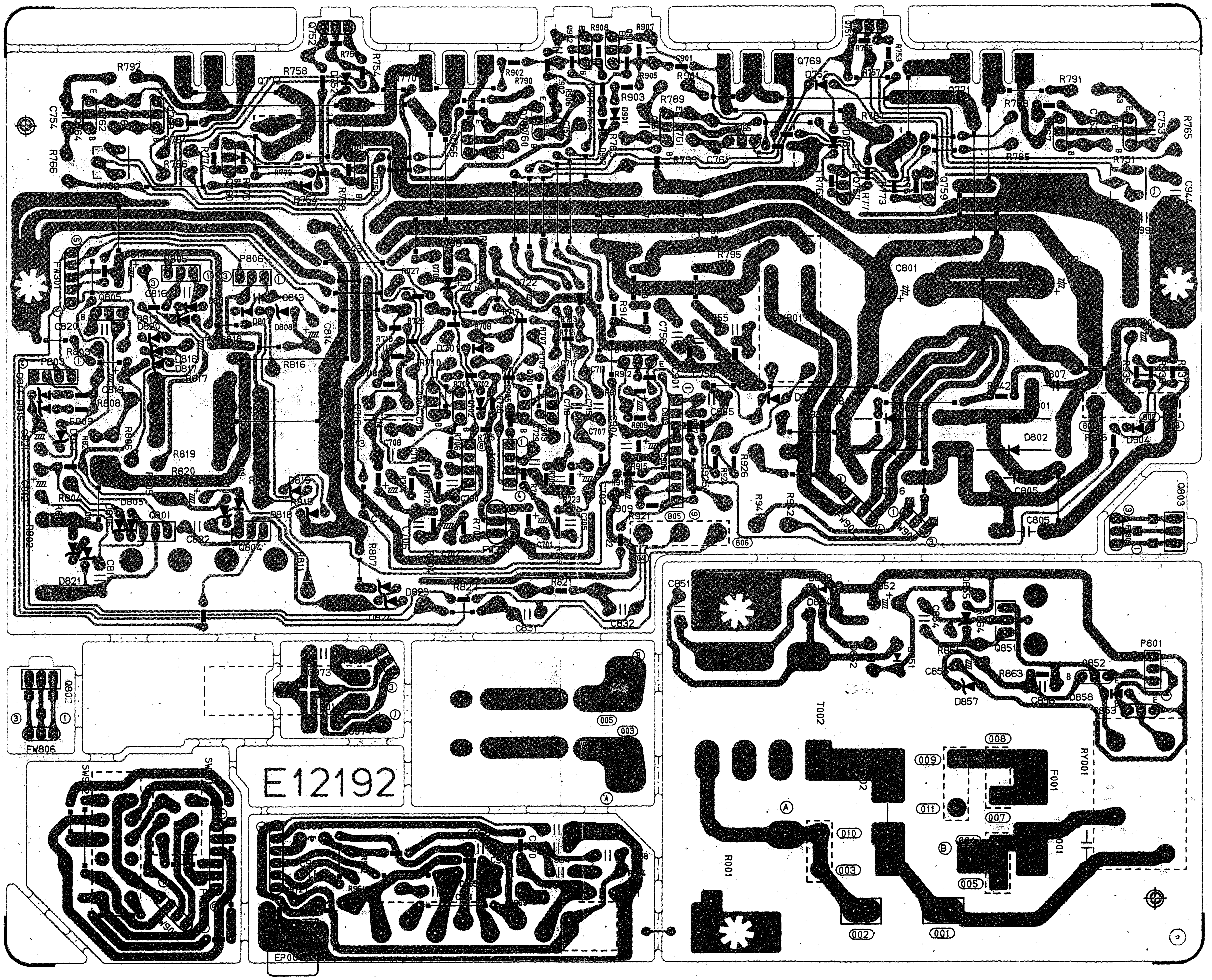
SW422
SW419
SW417
SW416
SW415
SW414
SW413
SW430
SW429
SW404
SW403
SW428
SW427
EP401
D438
PA401
PA402
PA403
IC491
D492
R407

(2) Power Amplifier PC Board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Q752
Q769
Q771
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R792
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R791
R765
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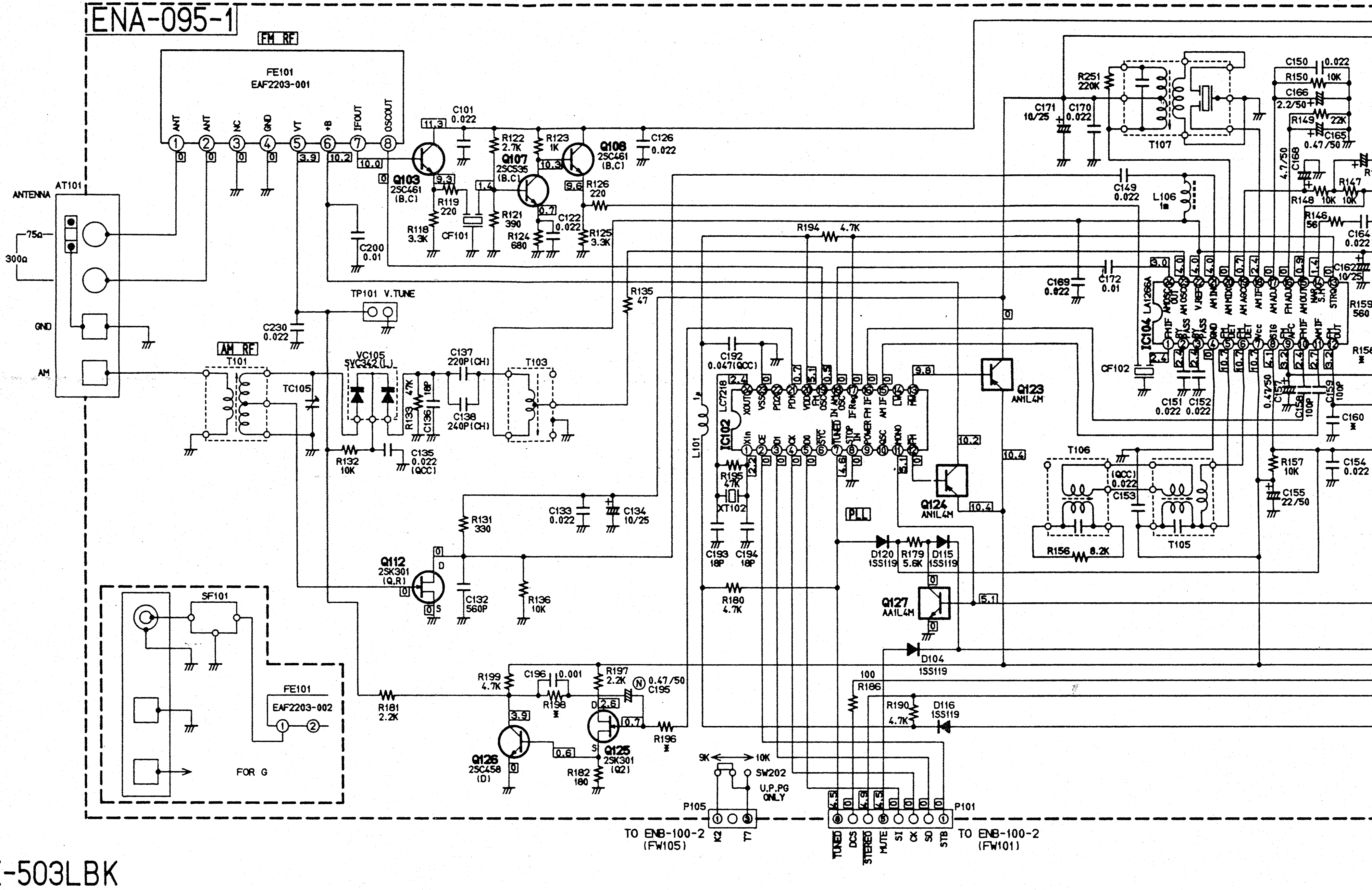
C944
C801
C802
Q801
D802
D904
C805
Q803
Q802
FW806
FW801
T002
RY001
F001
R001
C851
C852
C853
C831
C832
D821
D822
D823
R821
R822
EP001

SCHEMATIC DIAGRAM

(1) Tuner Section

RX-503BK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FE101
EAF2203-001
ANT
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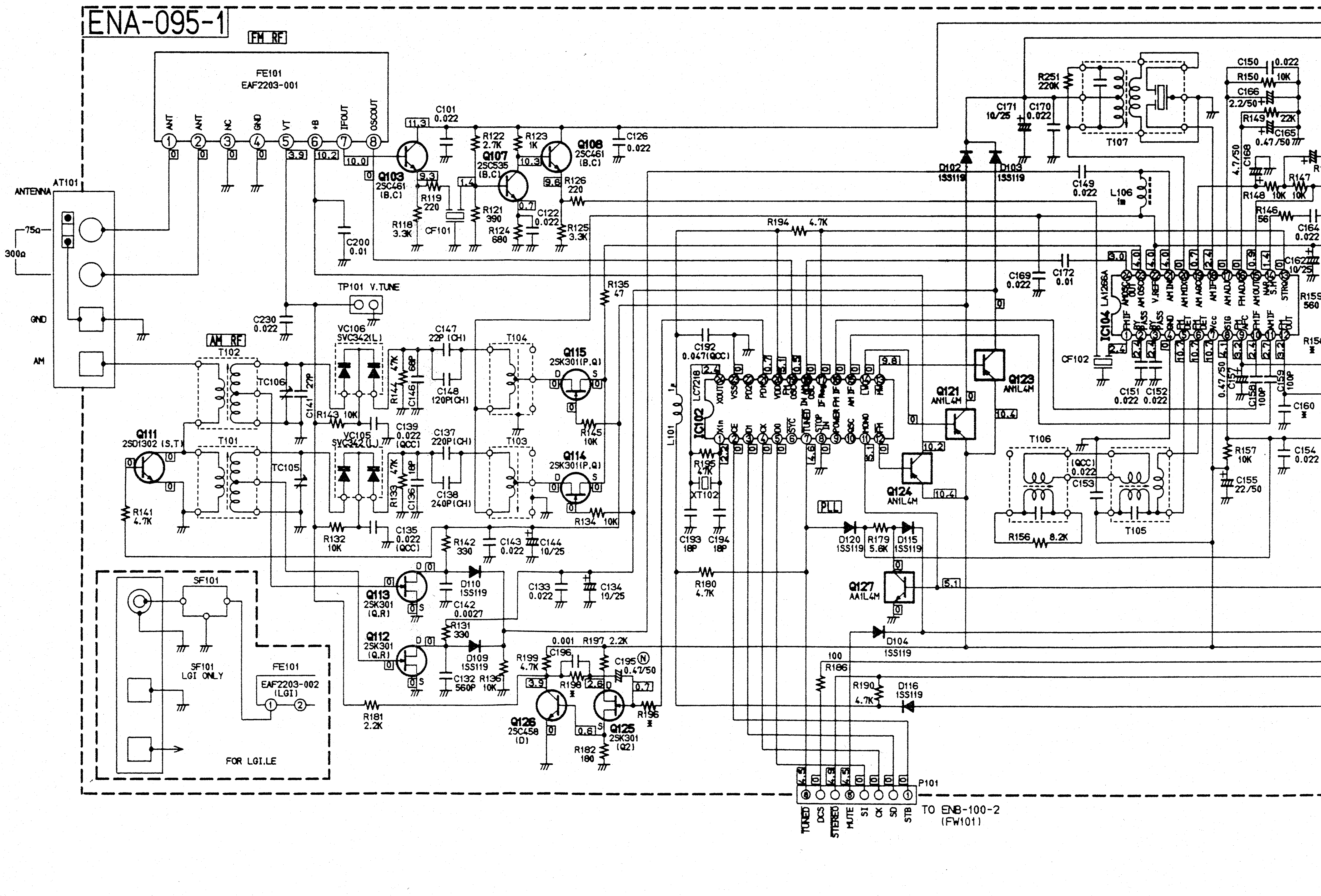
GND
VT
+B
IFOUT
OSCOUT
AT101
ANTENNA
75Ω
300Ω
AM RF
T101
TC105
VC105
SVC342(L)
TP101 V.TUNE
T103
Q103
2SC461
Q107
2SC535
Q108
2SC461
CF101
Q112
2SK301
SF101
FE101
EAF2203-002
FOR G
IC102
LC7218
XT102
PLL
Q123
AN1L4M
Q124
AN1L4M
Q127
AA1L4M
Q125
2SK301
Q126
2SC458
D120
1SS119
D115
1SS119
D104
1SS119
D116
1SS119
SW202
U.P.PG ONLY
9K
10K
P105
TO ENB-100-2
(FW105)
P101
TO ENB-100-2
(FW101)
TUNED
DCS
STEREO
MUTE
SI
CK
SO
STB
IC104
LA1266A
CF102
T105
T106
T107
L106

RX-503LBK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TC105
VC106
SVC342(L)
VC105
SVC342(L)
Q111
2SD1302
T104
T103
Q115
2SK301
Q114
2SK301
Q113
2SK301
Q112
2SK301
Q126
2SC458
Q125
2SK301
SF101
LGI ONLY
FE101
EAF2203-002
(LGI)
FOR LGI.LE
IC102
LC7218
XT102
PLL
Q121
AN1L4M
Q123
AN1L4M
Q124
AN1L4M
Q127
AA1L4M
D102
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D103
1SS119
D104
1SS119
D116
1SS119
IC104
LA1266A
CF102
T105
T106
T107
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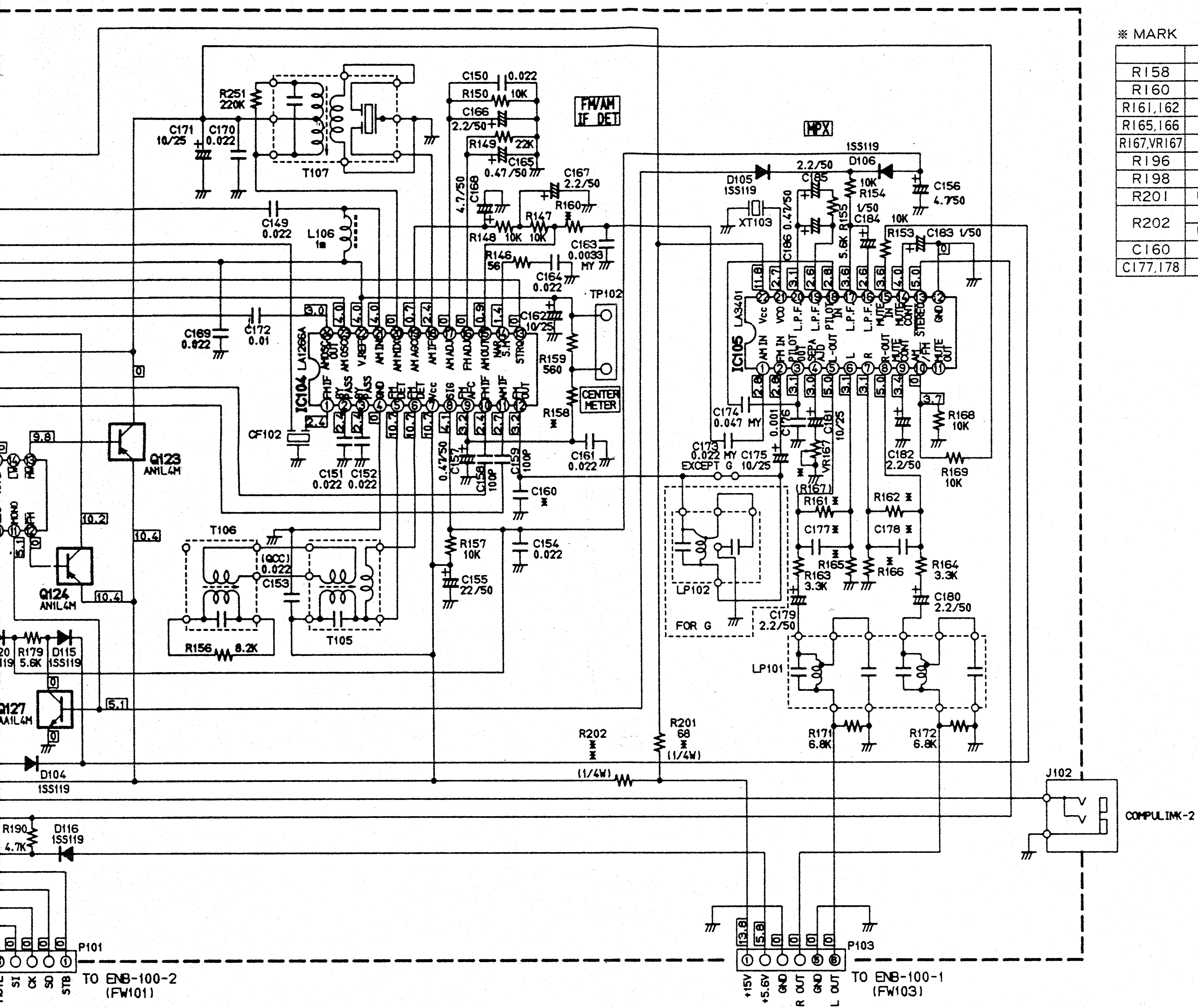
P101
TO ENB-100-2
(FW101)
TUNED
DCS
STEREO
MUTE
SI
CK
SO
STB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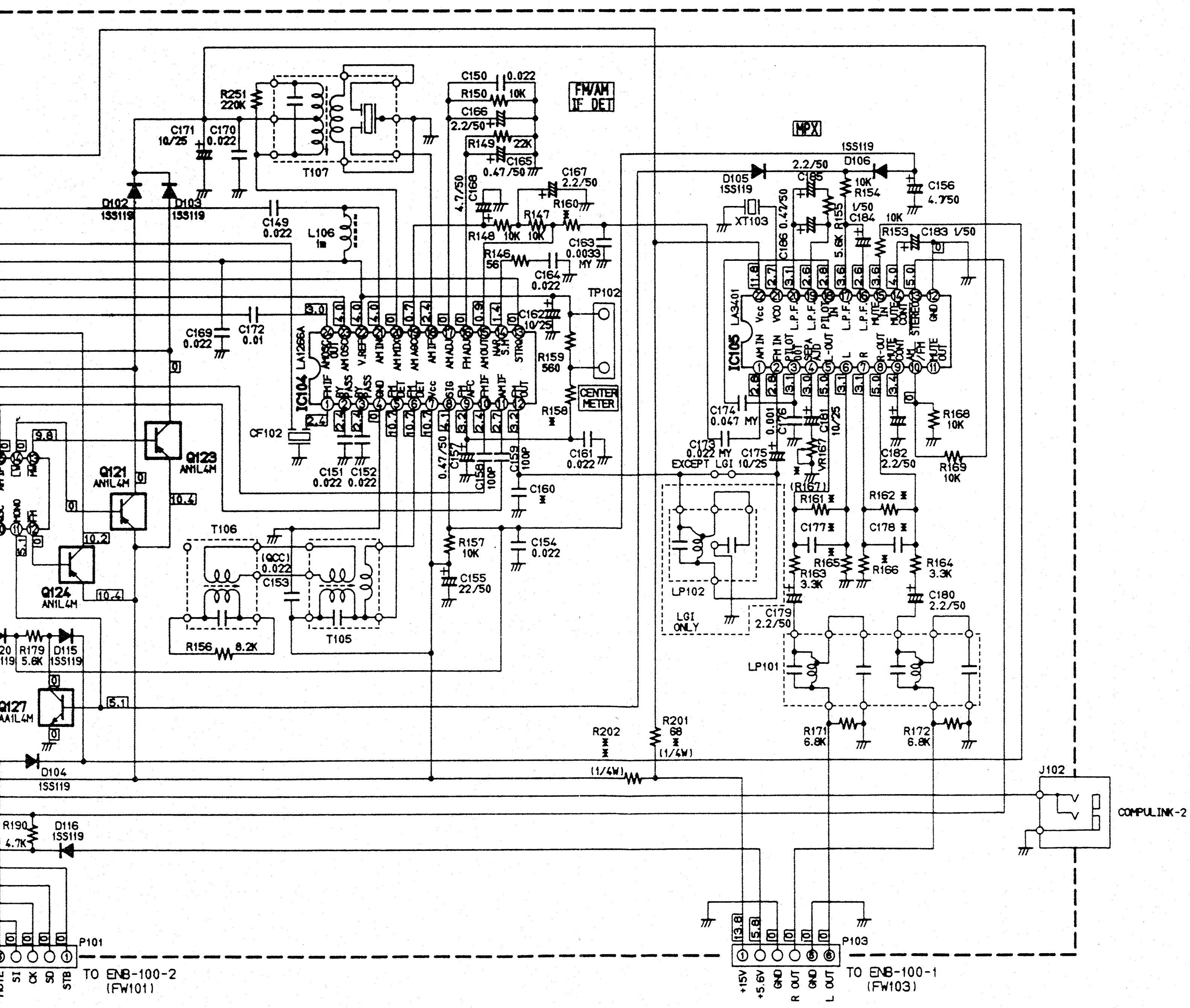
IC105 LA3401
FM/AM IF DET
MPX
Q123 AN1L4M
Q124 AN1L4M
Q127 AA1L4M
T105
T106
T107
CF102
XT103
TP102
CENTER METER
LP101
LP102
FOR G
EXCEPT G
D104 1SS119
D105 1SS119
D106 1SS119
D115 1SS119
D116 1SS119
R190 4.7K
R201 68 (1/4W)
R202 (1/4W)
J102
COMPULINK-2
P101
TO ENB-100-2 (FW101)
STB
SO
CK
SI
P103
TO ENB-100-1 (FW103)
+15V
+5.6V
GND
R OUT
GND
L OUT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IC105 LA3401
FM/AM IF DET
MPX
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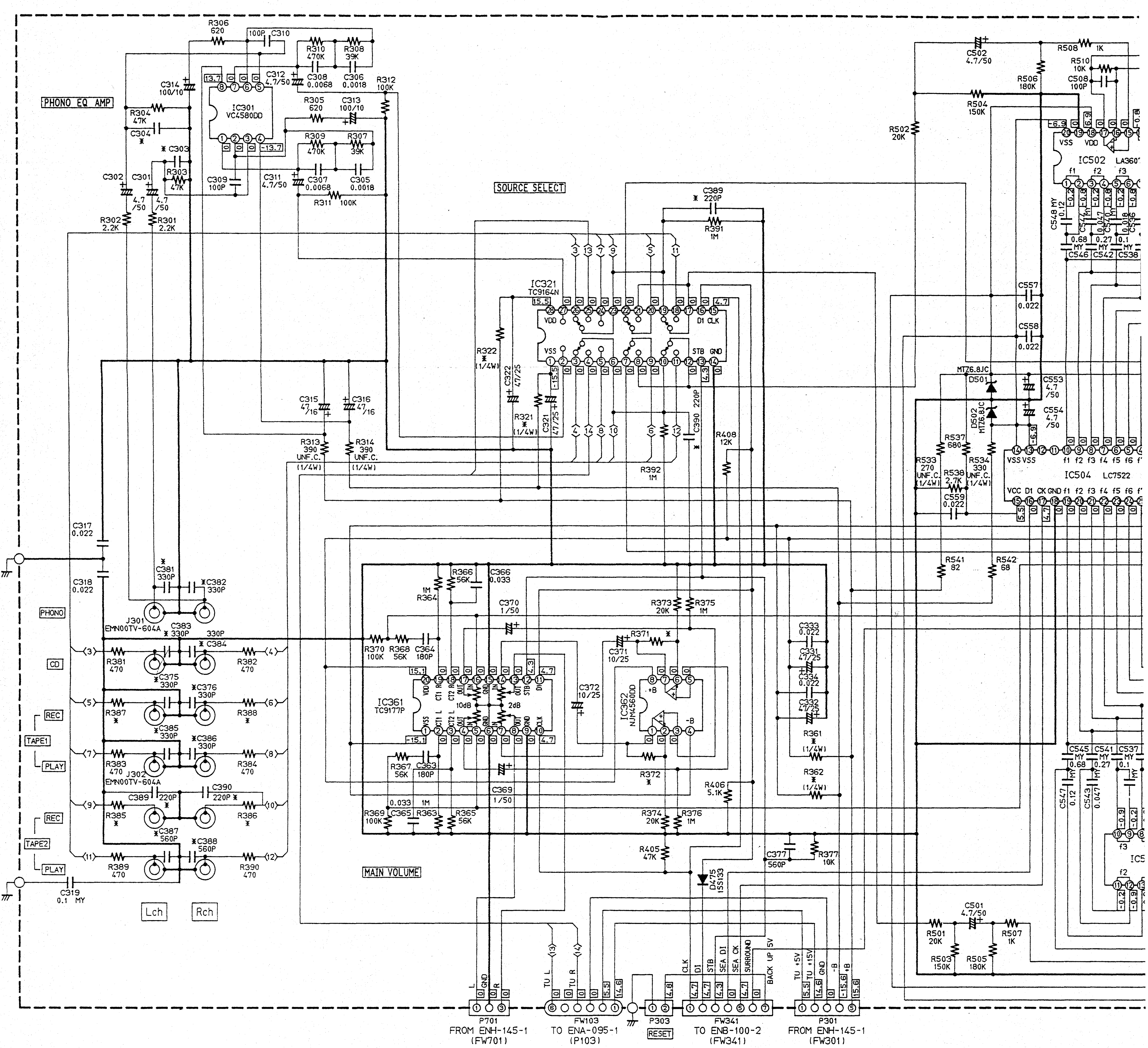
Q123 AN1L4M
Q124 AN1L4M
Q127 AA1L4M
D102 1SS119
D103 1SS119
T105
T106
T107
CF102
XT103
TP102
CENTER METER
LP101
LP102
LGI ONLY
EXCEPT LGI
D104 1SS119
D105 1SS119
D106 1SS119
D115 1SS119
D116 1SS119
R190 4.7K
R201 68 (1/4W)
R202 (1/4W)
J102
COMPULINK-2
P101
TO ENB-100-2 (FW101)
STB
SO
CK
SI
P103
TO ENB-100-1 (FW103)
+15V
+5.6V
GND
R OUT
GND
L OUT

※ MARK

	J, C	U	A	LE,LBS,LEV	G,LGI
R158	18K	33K	33K	33K	33K
R160	12K	12K	27K	27K	27K
R161,162	120K	120K	180K	180K	180K
R165,166	180K	180K	270K	270K	270K
R167,VR167	39K	39K	100K VR	100K VR	100K VR
R196	10K	10K	10K	2.2K	2.2K
R198	3.3K	3.3K	3.3K	8.2K	8.2K
R201	UNF.C.	UNF.C.	UNF.F.	UNF.F.	UNF.F.
R202	47	47	47	47	22
	UNF.C.	UNF.C.	UNF.F.	UNF.F.	UNF.F.
C160	220P	220P	220P	100P	220P
C177,178	560P	560P	270P	270P	270P

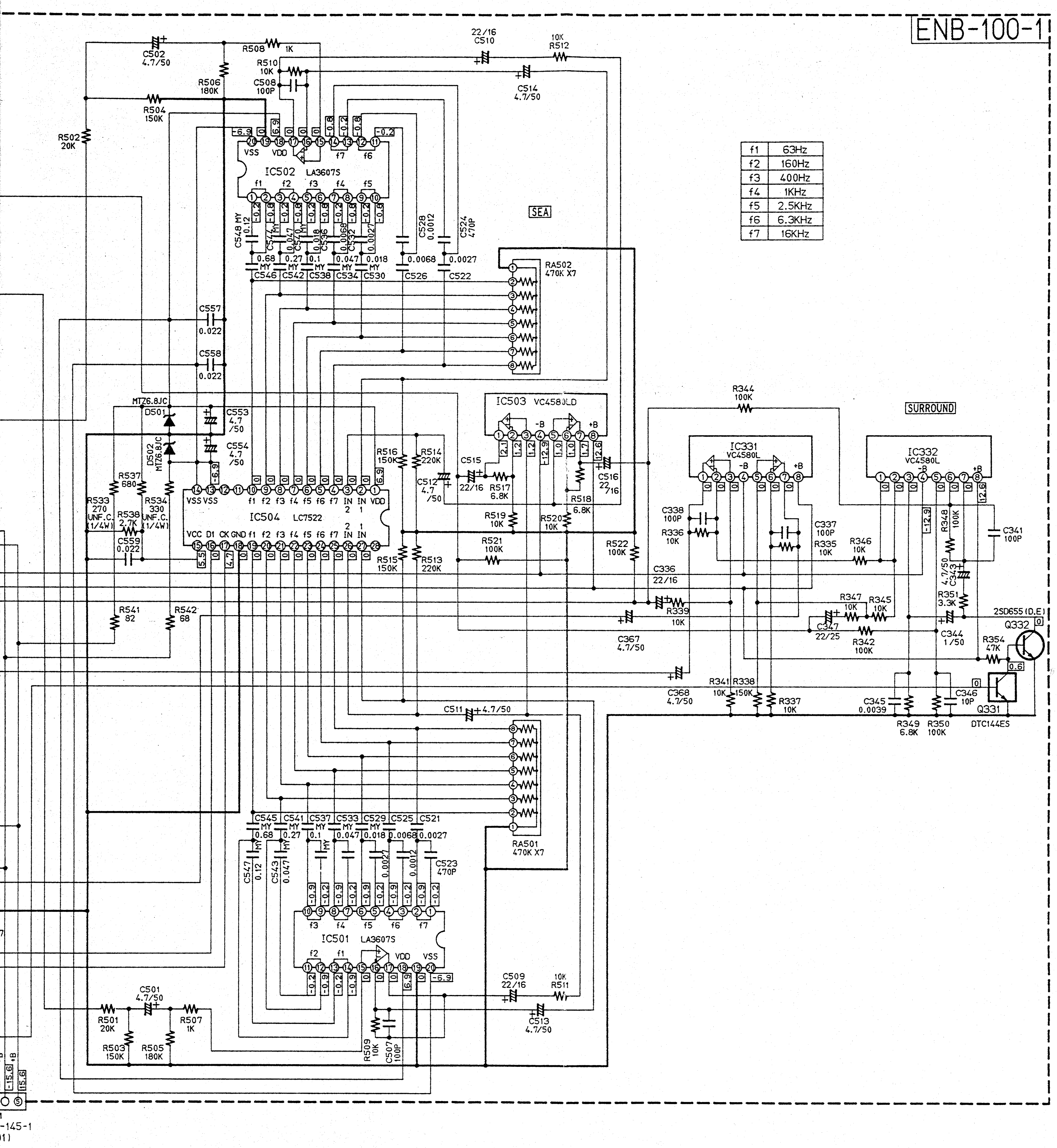
(2) Sourse Select & SEA Control Section



PHONO EQ AMP
IC301 VC4580DD
SOURCE SELECT
IC321 TC9164N
IC361 TC9177P
IC362 NJM4560DD
MAIN VOLUME
IC502 LA360
IC504 LC7522
J301 EMN00TV-604A
J302 EMN00TV-604A
PHONO
CD
TAPE1
REC
PLAY
TAPE2
Lch
Rch
D475 1SS133
D501 MTZ6.8JC
D502 MTZ6.8JC
P701 FROM ENH-145-1 (FW701)
FW103 TO ENA-095-1 (P103)
P303 RESET
FW341 TO ENB-100-2 (FW341)
P301 FROM ENH-145-1 (FW301)
L
GND
R
TU L
TU R
CLK
DI
STB
SEA DI
SEA CK
SURROUND
BACK UP 5V
TU +5V
TU +15V
-B
+B

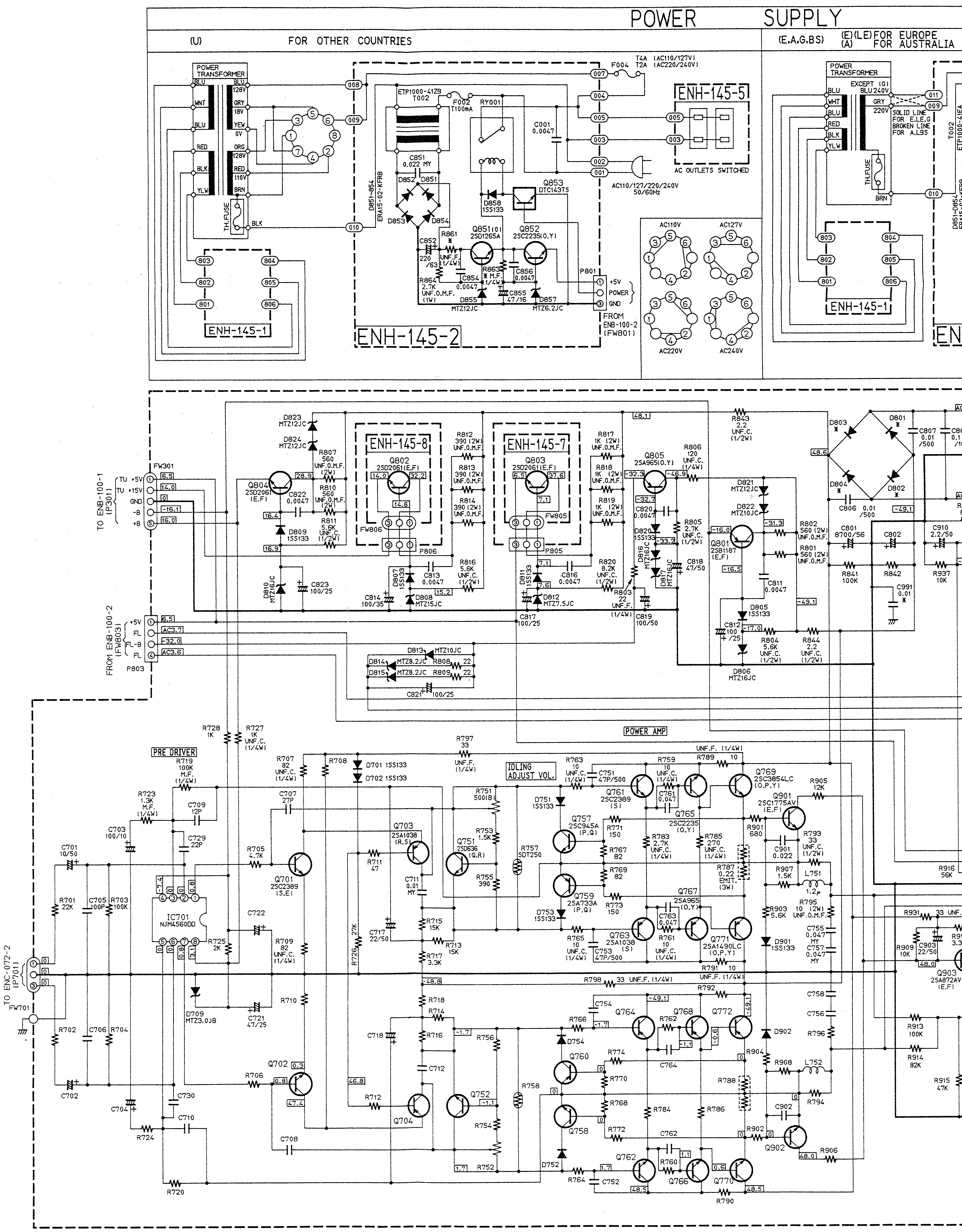
✱ MARK

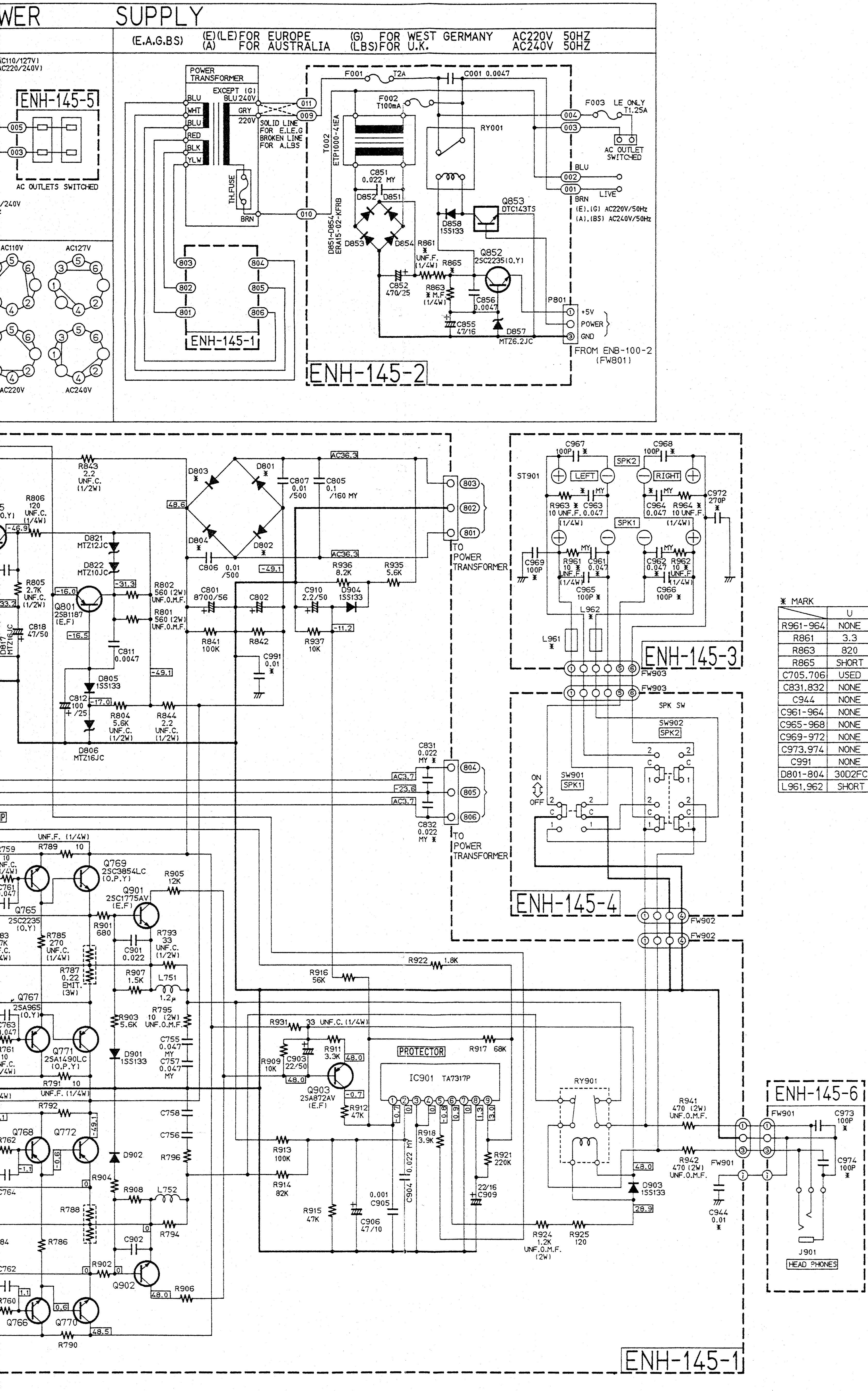
	J.C	U	E.A	LE.LBS	G
R321.322	UNF.C. 68	UNF.F. 47	UNF.F. 47	UNF.F. 47	UNF.F. 47
R361.362	UNF.C. 68	UNF.F. 47	UNF.F. 47	UNF.F. 47	UNF.F. 47
R371.372	15K	10K	10K	10K	10K
R385-388	470	470	470	470	2.2K
C303.304	100P	100P	100P	100P	470P
C375.376	NONE	NONE	NONE	NONE	USED
C381-390	NONE	NONE	NONE	NONE	USED


ENB-100-1
IC502 LA3607S
IC504 LC7522
IC501 LA3607S
IC503 VC4580LD
IC331 VC4580L
IC332 VC4580L
SEA
SURROUND
RA502 470K X7
RA501 470K X7
D501 MTZ6.8JC
D502 MTZ6.8JC
Q332 2SD655 (D.E)
Q331 DTC144ES
R502 20K
R504 150K
R506 180K
R508 1K
R510 10K
C508 100P
C502 4.7/50
C510 22/16
R512 10K
C514 4.7/50
C548 MY 0.12
C546 0.68
C542 0.27
C538 0.1
C534 0.047
C530 0.018
C528 0.0012
C526 0.0068
C524 470P
C522 0.0027
C557 0.022
C558 0.022
C553 4.7/50
C554 4.7/50
R537 680
R533 270 UNF.C. (1/4W)
R538 2.7K
R534 330 UNF.C. (1/4W)
C559 0.022
R541 82
R542 68
R516 150K
R514 220K
R515 150K
R513 220K
C512 4.7/50
C515 22/16
R517 6.8K
R519 10K
R518 6.8K
R520 10K
R521 100K
R522 100K
C516 22/16
R344 100K
C338 100P
R336 10K
C337 100P
R335 10K
R346 10K
R348 100K
C341 100P
C336 22/16
R339 10K
C367 4.7/50
R347 10K
R345 10K
C347 22/25
R342 100K
C343 4.7/50
R351 3.3K
C344 1/50
R354 47K
C368 4.7/50
R341 10K
R338 150K
R337 10K
C345 0.0039
R349 6.8K
R350 100K
C346 10P
C511 4.7/50
C545 0.68
C541 0.27
C537 0.1
C533 0.047
C529 0.018
C525 0.0068
C521 0.0027
C547 0.12
C543 0.047
C523 470P
C509 22/16
R511 10K
C513 4.7/50
C501 4.7/50
R501 20K
R507 1K
R503 150K
R505 180K
R509 10K
C507 100P
VSS
VDD
VCC
-15.6
+B
15.6
-145-1

f1	63Hz
f2	160Hz
f3	400Hz
f4	1KHz
f5	2.5KHz
f6	6.3KHz
f7	16KHz

(3) Power Amplifier & Power Supply Section


POWER SUPPLY
(U)
FOR OTHER COUNTRIES
(E,A,G,BS)
(E)(LE)FOR EUROPE
(A) FOR AUSTRALIA
POWER TRANSFORMER
TH.FUSE
ENH-145-1
ENH-145-2
ENH-145-5
ENH-145-7
ENH-145-8
ETP1000-41ZB T002
F002 T100mA
RY001
F004 T4A (AC110/127V) T2A (AC220/240V)
AC OUTLETS SWITCHED
AC110/127/220/240V 50/60Hz
AC110V
AC127V
AC220V
AC240V
FROM ENB-100-2 (FW801)
TO ENB-100-1 (P301)
FROM ENB-100-2 (FW803)
TO ENC-072-2 (P701)
FW701
PRE DRIVER
IC701 NJM4560DD
IDLING ADJUST VOL.
POWER AMP
Q701 2SC2389 (S,E)
Q702
Q703 2SA1038 (R,S)
Q751 2SD636 (Q,R)
Q769 2SC3854LC (O,P,Y)
Q771 2SA1490LC (O,P,Y)
Q801 2SB1187 (E,F)
Q802 2SD2061(E,F)
Q803 2SD2061(E,F)
Q804 2SD2061 (E,F)
Q805 2SA965(O,Y)
Q851 2SD1265A
Q852 2SC2235(O,Y)
Q853 DTC143TS
Q901 2SC1775AV (E,F)
Q903 2SA872AV (E,F)


WER SUPPLY
(E.A.G.BS) (E)(LE)FOR EUROPE (G) FOR WEST GERMANY AC220V 50HZ
(A) FOR AUSTRALIA (LBS)FOR U.K. AC240V 50HZ
AC110/127V
AC220/240V
ENH-145-5
AC OUTLETS SWITCHED
AC110V
AC127V
AC220V
AC240V
POWER TRANSFORMER
EXCEPT (G) BLU 240V
(G) GRY 220V
SOLID LINE FOR E.LE.G
BROKEN LINE FOR A.LBS
TH.FUSE
BLU
WHT
RED
BLK
YLW
BRN
ENH-145-1
ENH-145-2
F001 T2A
C001 0.0047
F002 T100mA
T002 ETP1000-41EA
C851 0.022 MY
D851~D854 ERA15-02-KFRB
RY001
Q853 DTC143TS
D858 1SS133
R861
R863
R865
Q852 2SC2235(O.Y)
C852 470/25
C856 0.0047
C855 47/16
D857 MTZ6.2JC
P801
+5V
POWER
GND
FROM ENB-100-2 (FW801)
F003 LE ONLY T1.25A
AC OUTLET SWITCHED
LIVE
(E).(G) AC220V/50Hz
(A).(BS) AC240V/50Hz
D801
D802
D803
D804
C807 0.01/500
C805 0.1/160 MY
C806 0.01/500
C801 8700/56
C802
R841 100K
R842
C991 0.01
R936 8.2K
R935 5.6K
C910 2.2/50
D904 1SS133
R937 10K
R843 2.2
R806 120
R805 2.7K
D821 MTZ12JC
D822 MTZ10JC
Q801 2SB1187 (E.F)
C818 47/50
D817 MTZ16JC
R802 560 (2W)
R801 560 (2W)
C811 0.0047
D805 1SS133
C812 100/25
R804 5.6K
R844 2.2
D806 MTZ16JC
TO POWER TRANSFORMER
C831 0.022 MY
C832 0.022 MY
ST901
LEFT
RIGHT
SPK1
SPK2
C967 100P
C968 100P
C969 100P
C972 270P
R961
R962
R963
R964
C961
C962
C963
C964
C965 100P
C966 100P
L961
L962
ENH-145-3
FW903
SPK SW
SW901
SW902
ON
OFF
ENH-145-4
FW902
Q769 2SC3854LC (O.P.Y)
Q901 2SC1775AV (E.F)
Q765
Q767 2SA965 (O.Y)
Q771 2SA1490LC (O.P.Y)
Q768
Q772
Q902
Q766
Q770
D901 1SS133
D902
R922 1.8K
R916 56K
R931 33
R917 68K
PROTECTOR
IC901 TA7317P
Q903 2SA872AV (E.F)
R909 10K
C903 22/50
R911 3.3K
R912 47K
R913 100K
R914 82K
R915 47K
C904 0.022 MY
C905 0.001
C906 47/10
R918 3.9K
R921 220K
C909 22/16
RY901
R924 1.2K
R925 120
R941 470 (2W)
R942 470 (2W)
D903 1SS133
C944 0.01
FW901
ENH-145-6
C973 100P
C974 100P
J901
HEAD PHONES

⁂ MARK

	U	E.A	G.GI	BS
R961-964	NONE	NONE	USED	NONE
R861	3.3	33	22	27
R863	820	820	820	910
R865	SHORT	SHORT	SHORT	12
C705.706	USED	USED	NONE	USED
C831.832	NONE	NONE	USED	NONE
C944	NONE	NONE	USED	NONE
C961-964	NONE	NONE	USED	NONE
C965-968	NONE	NONE	USED	NONE
C969-972	NONE	NONE	USED	NONE
C973.974	NONE	NONE	USED	NONE
C991	NONE	NONE	USED	NONE
D801-804	30D2FC	30D2FC	30DF2SFC	30D2FC
L961.962	SHORT	SHORT	4.5μ	SHORT